RLP LOAN #1

APPLICATION FOR FINANCIAL ASSISTANCE

Revised 4/99

IMPORTANT: Please consult the "Instructions for Completing the Project Application" for assistance in completion of this form.

SUBDIVISION: CITY OF BLUE ASH **CODE#** 061-07300

DISTRICT NUMBER: 2 **COUNTY:** Hamilton **DATE** 09 / 09 / 06

CONTACT: JOHN L. EISENMANN, P.E., P.S. **PHONE #** (513) 791 - 1700 (THE PROJECT CONTACT PERSON SHOULD BE THE INDIVIDUAL WHO WILL BE AVAILABLE DURING BUSINESS HOURS AND WHO CAN BEST ANSWER OR COORDINATE THE RESPONSE TO QUESTIONS)

FAX (513) 791-1936 **E-MAIL** jeisenmann@cds-assoc.com

PROJECT NAME: BLUE ASH ROAD & HUNT ROAD IMPROVEMENTS

SUBDIVISION TYPE
(Check Only 1)
__1. County
x 2. City
__3. Township
__4. Village
__5. Water/Sanitary District
(Section 6119 or 6117 O.R.C.)

FUNDING TYPE REQUESTED
(Check All Requested & Enter Amount)
__ 1. Grant _____
x 2. Loan $1,445,000.00
__ 3. Loan Assistance $_____

PROJECT TYPE
(Check Largest Component)
x 1. Road
__2. Bridge/Culvert
__3. Water Supply
__4. Wastewater
__5. Solid Waste
__6. Stormwater

TOTAL PROJECT COST: $ 1,515,000.00 **FUNDING REQUESTED:** $ 1,445,000.00

DISTRICT RECOMMENDATION
To be completed by the District Committee ONLY

GRANT:$_____ **LOAN ASSISTANCE:**$_____

SCIP LOAN: $_____ **RATE:**_____% **TERM:** _____yrs.

RLP LOAN: $1,445,000.00 **RATE:** 0 % **TERM:** 10 yrs.

(Check Only 1)
X State Capital Improvement Program
___Local Transportation Improvements Program
___Small Government Program

FOR OPWC USE ONLY

PROJECT NUMBER: C_____/C_____
Local Participation_____%
OPWC Participation _____%
Project Release Date: ___/___/___
OPWC Approval: _____

APPROVED FUNDING: $_____
Loan Interest Rate: _____%
Loan Term: _____years
Maturity Date: _____
Date Approved: ___/___/___
SCIP Loan _____ **RLP Loan**

1.0 PROJECT FINANCIAL INFORMATION

1.1 PROJECT ESTIMATED COSTS: (Round to Nearest Dollar)		TOTAL DOLLARS	FORCE ACCOUNT DOLLARS
a.) Basic Engineering Services:		$ .00	
Preliminary Design	$ .00		
Final Design	$ .00		
Bidding	$ .00		
Construction Phase	$ .00		
Additional Engineering Services *Identify services and costs below.		$ .00	
b.) Acquisition Expenses: Land and/or Right-of-Way		$ .00	
c.) Construction Costs:		$ 1,384,078.00	
d.) Equipment Purchased Directly:		$ .00	
e.) Permits, Advertising, Legal: (Or Interest Costs for Loan Assistance Applications Only)		$ .00	
f.) Construction Contingencies:		$ 130,922.00	
g.) TOTAL ESTIMATED COSTS:		$ 1,515,000.00	

*List Additional Engineering Services here:

Service:	Cost:

1.2 PROJECT FINANCIAL RESOURCES:

(Round to Nearest Dollar and Percent)

		DOLLARS	%
a.)	Local In-Kind Contributions	$ .00	
b.)	Local Revenues	$ .00	
c.)	Other Public Revenues GCWW	$ 20,000.00	1%
	ODOT	$ .00	
	Rural Development	$ .00	
	OEPA	$ .00	
	OWDA	$ .00	
	CDBG	$ .00	
	OTHER MRF (2007)	$ 50,000.00	3%
	SUBTOTAL LOCAL RESOURCES:	$ 70,000.00	4%
d.)	OPWC Funds		
	1. Grant	$ .00	
	2. Loan	$ 1,445,000.00	96%
	3. Loan Assistance	$ .00	
	SUBTOTAL OPWC RESOURCES:	$ 1,445,000.00	96%
e.)	TOTAL FINANCIAL RESOURCES:	$ 1,515,000.00	100%

1.3 AVAILABILITY OF LOCAL FUNDS:

Attach a statement signed by the Chief Financial Officer listed in section 5.2 certifying all local share funds required for the project will be available on or before the earliest date listed in the Project Schedule section.

ODOT PID# _____ Sale Date:

STATUS: (Check one)

Traditional
Local Planning Agency (LPA)
State Infrastructure Bank

2.0 PROJECT INFORMATION

If project is multi-jurisdictional, information must be consolidated in this section.

2.1 PROJECT NAME: BLUE ASH ROAD AND HUNT ROAD IMPROVEMENTS

2.2 BRIEF PROJECT DESCRIPTION - (Sections A through C):

A: SPECIFIC LOCATION:

Blue Ash Road from southern corporation limit to Cooper Road, Hunt Road from 150' west of West Avenue to Blue Ash Road, Hamilton County, Ohio.

PROJECT ZIP CODE: 45242

B: PROJECT COMPONENTS:

Blue Ash Road is a 31' back to back concrete pavement with integral curbs and an asphalt surface overlay that has exceeded its service life. Pavement cores are evidence that the concrete has failed and will no longer support the bus and vehicular traffic loads. The geotechnical report recommends total pavement replacement or rubbelization. Hunt Road has been impacted by localized drainage problems. The entire storm sewer system is substandard as evidenced by video records. Water pressure and flow to the area is low due to increased demand to the northeast.

C: PHYSICAL DIMENSIONS:

Blue Ash Road south of Ronald Reagan Highway is a three-lane (10' each) roadway with a center double left turn lane. Blue Ash Road north of Ronald Reagan Highway is a two-lane (12' each) road. Blue Ash Road has curb and gutter along the entire length with the gutter paved over.

Hunt Road is a two-lane (12' each) road without paved shoulders.

D: DESIGN SERVICE CAPACITY:

Detail current service capacity versus proposed service level.

Road or Bridge: Current ADT 10,184 (Blue Ash Road) Year: 2002 Projected ADT: ____ Year:
Current ADT 6,016 (Hunt Road) Year: 2002 Projected ADT: ____ Year:

Water/Wastewater: Based on monthly usage of 7,756 gallons per household, attach current rate ordinance. Current Residential Rate: $_____ Proposed Rate: $

Stormwater: Number of households served: 260

2.3 USEFUL LIFE / COST ESTIMATE: Project Useful Life: 30 Years - Roadway

Attach Registered Professional Engineer's statement, with original seal and signature confirming the project's useful life indicated above and estimated cost.

3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT	**$ 1,515,000.00**
TOTAL PORTION OF PROJECT NEW/EXPANSION	**$ .00**

4.0 PROJECT SCHEDULE: *

		BEGIN DATE	END DATE
4.1	**Engineering/Design:**	01 / 15 / 07	05 / 25 / 07
4.2	**Bid Advertisement and Award:**	10 / 18 / 07	12 / 13 / 07
4.3	**Construction:**	01 / 14 / 08	11 / 30 / 08
4.4	**Right-of-Way/Land Acquisition:**	06 / 18 / 07	11 / 30 / 07

* Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by the CEO of record and approved by the commission once the Project Agreement has been executed. The project schedule should be planned around receiving a Project Agreement on or about July 1st.

5.0 PROJECT OFFICIALS:

5.1	CHIEF EXECUTIVE OFFICER	Mr. Dennis E. Albrinck
	TITLE	Service Director
	STREET	City of Blue Ash
		4343 Cooper Road
	CITY/ZIP	City of Blue Ash, Ohio 45242
	PHONE	(513) 745 – 8545
	FAX	(513) 745 – 8594
	E-MAIL	Dalbrinck@blueash.com
5.2	CHIEF FINANCIAL OFFICER	Mr. James S. Pfeffer
	TITLE	Administrative Services Director
	STREET	City of Blue Ash
		4343 Cooper Road
	CITY/ZIP	City of Blue Ash, Ohio 45242
	PHONE	(513) 745 – 8507
	FAX	(513) 745 – 8594
	E-MAIL	Jpfeffer@blueash.com
5.3	PROJECT MANAGER	Mr. John L. Eisenmann, P.E., P.S.
	TITLE	City Engineer
	STREET	CDS Associates, Inc.
		11120 Kenwood Road
	CITY/ZIP	Cincinnati, Ohio 45242
	PHONE	(513) 791 – 1700
	FAX	(513) 791 – 1936
	E-MAIL	Jeisenmann@cds-assoc.com

Changes in Project Officials must be submitted in writing from the CEO.

6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Confirm in the blocks [ ] below that each item listed is attached.

[x] A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.

[x] A certification signed by the applicant's chief financial officer stating all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO, which identifies a specific revenue source for repaying the loan also, must be attached. Both certifications can be accomplished in the same letter.

[x] A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's original seal or stamp and signature.

[N/A] A cooperation agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.

[N/A] Projects which include new and expansion components and potentially affect productive farmland should include a statement evaluating the potential impact. If there is a potential impact, the Governor's Executive Order 98-VII and the OPWC Farmland Preservation Review Advisory apply.

[x] Capital Improvements Report: (Required by O.R.C. Chapter 164.06 on standard form)

[x] Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements, which may be required by your *local* District Public Works Integrating Committee.

7.0 APPLICANT CERTIFICATION:

The undersigned certifies that: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission as identified in the attached legislation; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement on this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding from the project.

Dennis E. Albrinck, Service Director
Certifying Representative (Type or Print Name and Title)

Dennis E. Albrinck 9-13-06
Original Signature/Date Signed

CDS Associates Inc

City of Blue Ash Ohio

Blue Ash and Hunt Road Improvements

08/07/2006

SCIP / MRF

2006003-026

ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	Blue Ash and Hunt Road	
					QNTY	COST
1	201	CLEARING AND GRUBBING, AS PER PLAN	LUMP SUM		1	$ 30,000.00
2	202	PIPE REMOVED, 24" AND UNDER	FOOT	$ 10.00	2609	$ 26,090.00
3	202	CATCH BASIN REMOVED	EACH	$ 250.00	13	$ 3,250.00
4	202	MANHOLE REMOVED	EACH	$ 800.00	9	$ 7,200.00
5	202	REMOVAL MISC.: PRIVATE SIGN FOOTING	EACH	$ 500.00	1	$ 500.00
6	202	REMOVAL MISC.: EX. TRAFFIC SIGN AND POST	EACH	$ 25.00	33	$ 825.00
		ROADWAY				
7	203	EXCAVATION including pacement removal	CUBIC YARD	$ 22.00	9775	$ 215,050.00
8	203	EMBANKMENT	CUBIC YARD	$ 12.00	849	$ 10,188.00
9	204	SUBGRADE COMPACTION WITH GEOTEXTILE / GEOGRID	SQUARE YARD	$ 2.50	18900	$ 47,250.00
10	*204	PROOF ROLLING	HOUR	$ 100.00	140	$ 14,000.00
11	*304	GRANULAR MATERIAL FOR SUBGRADE REPAIR	CUBIC YARD	$ 45.00	700	$ 31,500.00
		DRAINAGE/ SANITARY				
12	603	PIPE SIZE DIFFERENCE (36" INSTEAD OF 18" OR 24")	FOOT	$ 60.00	985	$ 59,100.00
13	603	REPAIR 48" CONDUIT, TYPE A, 707.02	LUMP SUM	$ 10,000.00	1	$ 10,000.00
14	603	12" CONDUIT, TYPE B, CLASS III	FOOT	$ 60.00	2298	$ 137,880.00
15	603	15" CONDUIT, TYPE B, CLASS III	FOOT	$ 70.00	400	$ 28,000.00
16	603	18" CONDUIT, TYPE B, CLASS III	FOOT	$ 75.00	1193	$ 89,475.00

* Denotes contingency item, Use only as directed by Engineer

CDS Associates Inc

City of Blue Ash Ohio

Blue Ash and Hunt Road Improvements

08/07/2006

SCIP / MRF

2006003-026

ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	Blue Ash and Hunt Road	
					QNTY	COST
17	603	24" CONDUIT, TYPE B, CLASS III	FOOT	$ 120.00	455	$ 54,600.00
18	604	MANHOLE, NO. 3	EACH	$ 3,500.00	17	$ 59,500.00
19	604	CATCH BASIN, NO. 3	EACH	$ 2,500.00	47	$ 117,500.00
20	604	CATCH BASIN, NO. 3A	EACH	$ 2,000.00	13	$ 26,000.00
21	604	CATCH BASIN, NO.2-2-A	EACH	$ 1,500.00	2	$ 3,000.00
22	604	CATCH BASIN, NO.2-2-B	EACH	$ 1,500.00	9	$ 13,500.00
23	605	UNCLASSIFIED PIPE UNDERDRAIN, 707.15 (6")	FOOT	$ 15.00	8878	$ 133,170.00
24	*603	4"-8" CONDUIT, FOR DRAINAGE CONNECTIONS	FOOT	$ 12.00	500	$ 6,000.00
25	*603	6"-8" CONDUIT TYPE C, 706.01, 706.02, 706.03, WITH JOINTS PER 706.11 OR 706.12	FOOT	$ 15.00	500	$ 7,500.00
26	*603	FARM DRAINS / ROOF DRANS	FOOT	$ 8.00	500	$ 4,000.00
27	SPL	CASING UNDER R.R	FOOT	$ 400.00	60	$ 24,000.00
		MAINTENANCE OF TRAFFIC				
28	614	MAINTAINING TRAFFIC	LUMP SUM	$ 50,000.00	1	$ 50,000.00
29	619	FIELD OFFICE, TYPE A	LUMP SUM	$ 10,000.00	1	$ 10,000.00
30	624	MOBILIZATION	LUMP SUM	$ 40,000.00	1	$ 40,000.00
		WATER WORKS (LOCAL)	LUMP SUM	$125,000.00	1	$ 125,000.00
		SUBTOTAL				$ 1,384,078.00
		CONTINGENCY				$ 130,922.00
		TOTAL OPINION OF CONSTRUCTION COST				**$ 1,515,000.00**

* Denotes contingency item, Use only as directed by Engineer

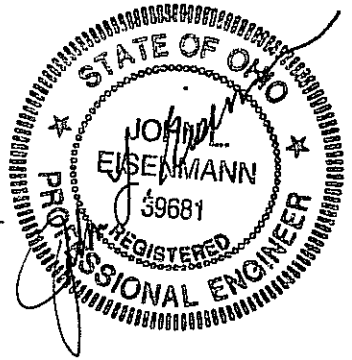
ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	Blue Ash and Hunt Road	
					QNTY	COST

USEFUL LIFE: UPON SATISFACTORY COMPLETION OF THE WORK, THE USEFUL LIFE OF THE BLUE ASH ROAD AND HUNT ROAD IMPROVEMENTS WILL BE 30 YEARS.

THE ABOVE OPINION OF CONSTRUCTION COST IS SUBJECT TO ADJUSTMENT UPON DETAILED CONSTRUCTION PLAN COMPLETION, AND UPON RECEIPT OF BIDS FROM QUALIFIED CONTRACTORS.

John L. Eisenmann 11/30/2006

John L. Eisenmann, P.E., P.S. / Date
Ohio Registration #39681



* Denotes contingency item, Use only as directed by Engineer

City of Blue Ash
Interoffice Memorandum

TO: Dennis E. Albrinck, Service Director

FROM: David M. Waltz, City Manager

SUBJECT: Ohio Public Works Commission (OPWC) Application for Financial Assistance Designation of Responsibilities Official

DATE: August 15, 2006

COPIES: James S. Pfeffer, Richard J. Dole, John Eisenmann (CDS Associates)

The purpose of this memorandum is to designate Dennis E. Albrinck, Service Director of the City of Blue Ash, as the City official responsible for the submittal of any application, form, agreement, etc. to the Ohio Public Works Commission (OPWC) for financial assistance.

Mr. Albrinck shall have the authority to submit applications to, meet with, and execute agreements with the Ohio Public Works Commissions (OPWC) or the District 2 Public Works Integrating Committee (DPWIC), on behalf of the City of Blue Ash.

An alternate designation is hereby made in the case of the absence of Mr. Albrinck for Assistant Service Director Richard J. Dole to possess the necessary responsibility to act in this capacity.

David M. Waltz, City Manager

Dea\SCIPAppt

City of Blue Ash
4343 Cooper Road
Blue Ash, OH 45242-5699
ph. 513.745.8500
fax 513.745.8594
BlueAsh.com

David M. Waltz
City Manager

BLUE ASH
ASPIRE. ACHIEVE. ADVANCE.

August 15, 2006

STATE CAPITAL IMPROVEMENT PROGRAM ROUND 21
CERTIFICATION OF LOCAL FUNDS

STATUS OF FUNDS

THIS IS TO CERTIFY THE CITY OF BLUE ASH WILL REPAY THE LOAN FOR THE BLUE ASH / HUNT ROAD IMPROVEMENT PROJECT FROM THE BLUE ASH / HUNT ROAD IMPROVEMENT PROJECT FUND.

THE CITY OF BLUE ASH HAS APPLIED FOR $100,000 FROM THE MUNICIPAL ROAD FUND (MRF) WITH THE HAMILTON COUNTY ENGINEER'S OFFICE.

ATTACHED IS A COPY OF THE DECEMBER 31, 2005 COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE CITY OF BLUE ASH.

James S. Pfeffer

JAMES S. PFEFFER, TREASURER

ORDINANCE NO. 2006-54

AUTHORIZING THE CITY MANAGER TO SEEK FINANCIAL ASSISTANCE FROM THE STATE CAPITAL IMPROVEMENT PROGRAM (SCIP) FOR FUNDING A CAPITAL INFRASTRUCTURE IMPROVEMENT PROJECT AND RELATED FINANCING COSTS; AND DECLARING AN EMERGENCY

Be it ordained by the Council of the City of Blue Ash, Ohio, not less than five (5) members thereof concurring,

SECTION I.

The City Manager is hereby authorized to apply to the District Two Public Works Integrating Committee of Hamilton County and the Ohio Public Works Commission for financial assistance for the Blue Ash/Hunt Road Improvement Project.

SECTION II.

The City Manager is further authorized to enter into any grant agreements as may be necessary and appropriate for obtaining this financial assistance in conjunction with the recommendations of the City Engineer and the Service Director, and approved as to form by the City Solicitor, in accordance with all authority granted to and limitations upon by the City's Treasurer.

SECTION III.

The City Manager is further authorized to submit as a part of the application for financial assistance for the Blue Ash/Hunt Road Improvement Project an intent to accept a loan or borrowed funds component, providing the potential for borrowing part, or all, of the Project cost at no interest, or very low interest, for a period of up to 30 years.

SECTION IV.

This ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of public peace, health, safety, and welfare of the City of Blue Ash, Ohio; the reason for the emergency being the need to provide the necessary authority for the City to apply for these funds. Therefore, this ordinance shall take effect and be in force from and after its passage.

PASSED this 10th day of August, 2006.

Robert J. Buckman, Jr., Mayor

Jamie K. Eifert, Clerk of Council

APPROVED AS TO FORM:

Mark A. Vander Laan, Solicitor

THIS IS A CERTIFIED TRUE AND CORRECT COPY:

Jamie K. Eifert, Clerk of Council

ORDINANCE NO. 93-15

CREATING CHAPTER 172 OF THE BLUE ASH CODE OF ORDINANCES TO PROVIDE FOR THE IMPOSITION OF AN ANNUAL MUNICIPAL MOTOR VEHICLE LICENSE TAX IN ACCORDANCE WITH THE PROVISIONS OF SECTION 4504.171 OF THE OHIO REVISED CODE AND TO PROVIDE FOR THE COLLECTION OF SAID TAX BY THE REGISTRAR OF MOTOR VEHICLES OF THE STATE OF OHIO OR DEPUTY REGISTRARS AT THE TIME APPLICATIONS FOR REGISTRATION OF MOTOR VEHICLES ARE REQUIRED UNDER THE OHIO REVISED CODE

WHEREAS, various provisions of the Ohio Revised Code provide for the levy of a Municipal Motor Vehicle License Tax by the legislative authority of a municipal corporation; and

WHEREAS, the provisions of Section 4504.171 of the Revised Code authorize municipal corporations to adopt a Municipal Motor Vehicle License Tax which would be in addition to other permissive Motor Vehicle License Taxes levied by counties or municipal corporations; and

WHEREAS, the City of Blue Ash is desirous of levying this permissive Municipal Motor Vehicle License Tax to obtain additional revenues to be used generally, and as more specifically provided here and in the Revised Code, to improve the streets of the City.

Be it ordained by the Council of the City of Blue Ash, Ohio,

SECTION I.

That Chapter 172 of Title IV of the Codified Ordinances of the City of Blue Ash, Ohio is hereby adopted, creating Chapter 172, Municipal Motor Vehicle License Tax, which shall read as follows:

Section 172.01 Levy of Annual Tax.

There is hereby levied an annual permissive motor vehicle license tax upon the operation of motor vehicles upon the public roads or highways of the City of Blue Ash. Such tax shall be at the rate of $5.00 per motor vehicle on all motor vehicles the district of registration of which, as defined in Section 4503.10 of the Revised Code, is in the City of Blue Ash. This tax shall be in addition to the taxes at the rates specified in Sections 4503.04 and 4503.16 of the Ohio Revised Code. This tax is to supplement revenues already available under Ohio Revised Code Sections 4504.04, 4504.06, 4504.17, and 4504.172. This tax is levied under the authority of Section 4504.171 of the Ohio Revised Code.

As used in this chapter the term "motor vehicles" means any and all vehicles included within the definition of motor vehicles in Section 4501.01 and 4505.01 of the Ohio Revised Code and includes motorized bicycles.

Section 172.02 Use of Tax Levy Proceeds.

The proceeds of the tax levied under Section 172.01 are for the purpose of paying the costs and expenses of enforcing and administering the tax provided for in Section 172.01 and for planning, constructing, reconstructing, improving, maintaining and repairing public roads, highways and streets; maintaining and repairing bridges and viaducts; paying the City's portion of the costs and expenses of cooperating with the Department of Transportation in the planning,

improvement and construction of State highways; paying the City's portion of the compensation, damages, costs and expenses of planning, constructing, reconstructing, improving, maintaining and repairing roads and streets; paying any costs apportioned to the City under Section 4907.47 of the Ohio Revised Code; paying debt service charges on notes or bonds of the City issued for such purposes; purchasing, erecting and maintaining street and traffic signs and markers; purchasing, erecting and maintaining traffic lights and signals; and to supplement revenue already available for such purposes, provided that any use of such tax proceeds shall be in accord with the purposes set forth in Sections 4504.04, 4504.06, 4504.17 and 4504.171 of the Ohio Revised Code.

The municipal motor vehicle license tax levied under Section 172.01 shall be imposed from and after the earliest date permitted by law and continue in effect until repealed by ordinance.

Section 172.03. Payment of the Tax.

The tax imposed by Section 172.01 shall be paid to the Registrar of Motor Vehicles of the State of Ohio or to a Deputy Registrar at the time application for the registration of a motor vehicle is made as provided in Section 4503.10 of the Ohio Revised Code.

Section 172.04. Reductions and Exemptions of the Tax.

The tax imposed by Section 172.01 shall be subject to reductions in the manner provided in Section 4503.11 of the Ohio Revised Code and to the exemptions provided in Sections 4503.16, 4503.17, 4503.171, 4503.41 and 4503.43 of the Ohio Revised Code.

Section 172.05. Severability

If any portion or section of this chapter shall be declared invalid or unlawful for any reason, such portion or section shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions thereof.

SECTION II.

That the amounts received from the tax levied under the provisions of this ordinance shall be deposited into the Street Construction, Maintenance and Repair Fund or other appropriate fund to be used for the purposes identified in Section 172.02 as appropriate.

SECTION III.

That the Clerk of Council and the City Manager shall do all things necessary to carry out and enforce this ordinance, including certifying this ordinance to the appropriate State officials within the time provided by law.

SECTION IV.

That the Treasurer and Finance Officer shall deposit the receipts from the tax levied hereunder and the City Manager shall be authorized to make expenditures from the receipts in accordance with the lawful purposes set forth in Section I hereof.

SECTION V.

That this ordinance shall be in force and take effect from and after the earliest period allowed by law.

PASSED this 2nd day of February, 1993.

Walter L. Reuszer, Mayor

Mary E. Malone, Clerk of Council

APPROVED AS TO FORM:

Mark A. Vander Laan, Solicitor

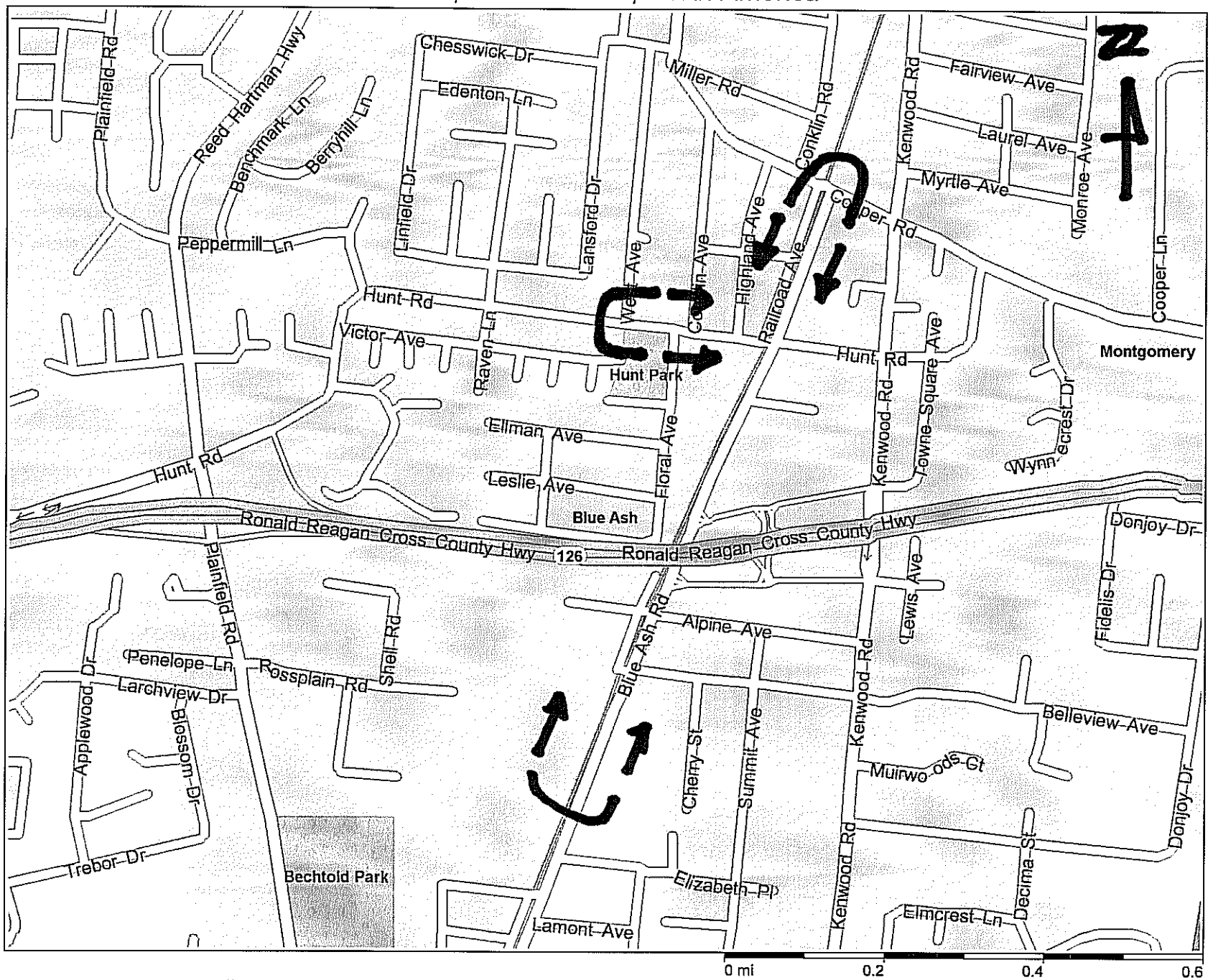
THIS IS A CERTIFIED TRUE AND CORRECT COPY:

Mary E. Malone, Clerk of Council

VICINITY MAP

BLUE ASH RD.

Ohio, United States, North America



HAMILTON COUNTY ENGINEER'S OFFICE
PROJECT APPLICATION - MUNICIPAL ROAD FUND - 2007

INSTRUCTIONS: Use one form for each project. Assign priority to projects. The Municipality's Engineer, or a Registered Engineer of the Municipality's choosing shall prepare the application cost estimate. **Submit by 4:00 p.m., September 1, 2006.**

(1) Municipality City of Blue Ash

(2) Road Name Blue Ash and Hunt Road Improvements

(3) Project Limits Blue Ash Road from the southern corporation limit to Cooper Road, and Hunt Road from West Avenue to Blue Ash Road.
(Please give a "from - to" limit if possible).

(4) Project Priority (1)

(5) Present Roadway Data: (Answer all that apply)

(a) Pav't. Width 30' (b) R/W Width 60' (c) Curb Type Rolled (Blue Ash Road)

(d) Type Surface Asphalt (e) Type Base Concrete/Asphalt (f) Shldr. Type Untreated (Hunt Road)

(g) Shldr. Width N/A (h) Year Last Resurfaced Prior to 1988, (Blue Ash), 2004 (Hunt)

(6) **Present condition of project area: List deficiencies and reasons for improvement.**

Blue Ash Road is a 31' back to back concrete pavement with integral curbs and an asphalt surface overlay that has exceeded its service life. Pavement cores are evidence that the concrete has failed and will no longer support the bus and vehicular traffic loads. The geotechnical report recommends total pavement replacement or rubbelization. Hunt Road has been impacted by localized drainage problems. The entire storm sewer system is substandard as evidenced by video records.

(7) **Project description or statement of work to be done: Include width and type of new pavement and other project particulars.**

The improvements to Blue Ash Road will consist of replacement of the storm sewer system, 31' back to back full depth asphalt pavement with type 2 curb and gutter, sidewalks, new pavement markings, and signs. A northbound right turn lane will be provided on Blue Ash at Cooper Road. Hunt Road will be improved by adding Type 2 curb and gutter to the 24' pavement, providing a storm sewer system, mill and resurface the existing pavement, provide new pavement markings and signs.

(8) Traffic Data: (a) Present Volume 10,184 (b) Date of Count 8/20/02

(9) Cost Estimate:
When engineering plans are necessary, list the following costs:

(a) Preparation of preliminary plans & estimates, etc.		$ Complete
(b) Preparation of final plans & estimates, etc.		$ 160,000.00
(c) Construction Cost Estimate		$ 3,030,000.00
(d) Other Costs (Specify)		$ N/A
TOTAL AMOUNT OF MRF FUNDS APPLIED FOR	=	$ 100,000.00

(10) Estimated date construction can be started after approval January 14, 2008

(11) Estimated date construction can be started If not funded 100% from MRF Unknown

(12) Are the MRF funds to be used as matching funds for SCIP / LTIP? Yes x No
If yes, what percentage of the project cost? 3%

(13) Cost Estimate Prepared By: CDS Associates, Inc. Date: 8/26/06

(14) Application Prepared By: Jenny Gilbrick Date: 8/26/06
(Signature)

Make copies of this form as needed
2007 MRF FORM

City of Blue Ash
Interoffice Memorandum

TO: John Eisenmann, City Engineer

FROM: Dennis E. Albrinck, Service Director

SUBJECT: Water Hydrant Flow Testing Data – Blue Ash Road

DATE: August 26, 2005

COPIES: Rich Dole

Last year (2004), Lt. Ed Jansing made available to me the records the Fire Department had for hydrant flows on Blue Ash Road. As you can see from the chart, the gallons per minute (GPM's) ranged from a low of 651 to a high of 905. The Fire Department would like to see flows in the 1000-1500 GPM's on a hydrant.

					Flow Date	STATIC Press.	Flow Press.	Residual Press.	GPM	LINE SIZE
378	09500 BLUE ASH	ROAD	1	FRONT-3	10/01/00	58	48	56	824	12"
379	09479 BLUE ASH	ROAD	1	FRONT-2	10/01/00	58	44	55	788	12"
380	09419 BLUE ASH	ROAD	1	FRONT-12	10/01/00	60	44	56	788	12
381	09323 BLUE ASH	ROAD	1	FRONT-2	07/10/92 07/03/96 09/17/00	46 42 62	34 37 52	42 38 58	880 736 857	12 ↓
382	09279 BLUE ASH	ROAD	1	FRONT-4	05/23/93 07/03/96 09/17/00	46 42 62	34 29 52	42 39 58	696 654 857	12 ↑
383	09221 BLUE ASH	ROAD	1	FRONT-2	08/01/97 10/01/00	64 60	30 30	60 58	651 651	12 ↓
384	09111 BLUE ASH	ROAD	1	FRONT-2	07/10/92 07/29/99	46 60	36 52	42 59	905 857	12 ↓
385	09001 BLUE ASH	ROAD	1	FRONT-2	05/23/93 07/29/99	46 60	32 52	40 59	675 857	12 ↑
386	09491 RAILROAD	AVENUE	1	-						06

TRAFFIC CERTIFICATION STATEMENT

This is to certify that the attached documentation regarding 24-hour traffic volume has been obtained by a hose count taken at the location and date noted on the traffic count printout.

John L. Eisenmann 9/11/06

John L. Eisenmann, P.E., P.S. Date
City Engineer

2003003-09

Weather :
Counted by:TWIL
Board # :01317
Other :

CDS Associates, Inc.
11120 Kenwood Rd.
Cincinnati, Ohio 45242

Site Code : 00000000000093
Start Date: 08/20/2002
File I.D. : E:\TRAFFIC\MA
Page : 2

Street name :BLUE ASH RD.. Cross street:SOUTH OF BELLEVIEW AVE.

Begin Time	08/21 NB	Wed.	A.M. SB		Combine Total		08/21 NB	Wed.	P.M. SB		Combine Total	
12:00	8		13		21		70		91		161	
12:15	12		16		28		69		72		141	
12:30	16		3		19		96		65		161	
12:45	10	46	4	36	14	82	76	311	65	293	141	604
01:00	5		6		11		81		74		155	
01:15	3		6		9		79		75		154	
01:30	6		2		8		77		90		167	
01:45	6	20	5	19	11	39	85	322	65	304	150	626
02:00	3		2		5		64		84		148	
02:15	6		6		12		76		81		157	
02:30	5		5		10		93		100		193	
02:45	6	20	0	13	6	33	64	297	85	350	149	647
03:00	13		4		17		81		84		165	
03:15	4		3		7		99		98		197	
03:30	2		3		5		75		109		184	
03:45	2	21	2	12	4	33	89	344	128	419	217	763
04:00	2		1		3		78		99		177	
04:15	5		2		7		97		116		213	
04:30	15		3		18		88		92		180	
04:45	8	30	4	10	12	40	83	346	113	420	196	766
05:00	9		6		15		115		134		249	
05:15	7		4		11		105		129		234	
05:30	22		10		32		93		100		193	
05:45	19	57	16	36	35	93	90	403	121	484	211	887
06:00	29		13		42		78		116		194	
06:15	29		25		54		90		120		210	
06:30	56		36		92		87		88		175	
06:45	54	168	47	121	101	289	84	339	88	412	172	751
07:00	62		68		130		55		84		139	
07:15	86		50		136		72		80		152	
07:30	77		50		127		65		63		128	
07:45	114	339	79	247	193	586	50	242	83	310	133	552
08:00	95		68		163		78		71		149	
08:15	73		55		128		75		72		147	
08:30	86		63		149		43		60		103	
08:45	88	342	57	243	145	585	53	249	67	270	120	519
09:00	79		48		127		46		54		100	
09:15	65		43		108		48		43		91	
09:30	69		60		129		34		49		83	
09:45	61	274	45	196	106	470	32	160	48	194	80	354
10:00	56		51		107		33		39		72	
10:15	55		58		113		34		36		70	
10:30	51		60		111		21		31		52	
10:45	61	223	48	217	109	440	36	124	30	136	66	260
11:00	60		75		135		12		30		42	
11:15	59		74		133		21		43		64	
11:30	64		105		169		21		18		39	
11:45	84	267	74	328	158	535	13	67	12	103	25	170
Totals	1807		1478		3285		3204		3695		6899	
Split %	55.0%		44.9%				46.4%		53.5%			
Peak Hour	07:15		11:00		07:45		05:00		05:00		05:00	
Volume	372		328		633		403		484		887	
P.H.F.	.81		.78		.81		.87		.90		.89	

Total 10,184

Weather :
Counted by:TWEB
Board # :07350
Other :

CDS Associates, Inc.
11120 Kenwood Rd.
Cincinnati, Ohio 45242

Site Code : 00000020001093
Start Date: 08/20/2002
File I.D. : E:\TRAFFIC\TA
Page : 2

Street name :EUCLID RD. : Cross street:WEST OF WEST AVE.

Begin Time	08/21 WB	Wed.	A.M. EB		Combine-------> Total		08/21 WB	Wed.	P.M. EB		Combine-------> Total	
12:00	5		5		10		72		53		125	
12:15	4		3		7		56		55		111	
12:30	5		3		8		70		45		115	
12:45	3	17	3	14	6	31	60	258	65	218	125	476
01:00	0		3		3		61		61		122	
01:15	5		2		7		52		49		101	
01:30	3		0		3		46		49		97	
01:45	1	9	2	7	3	16	53	214	40	199	93	413
02:00	4		3		7		48		45		93	
02:15	1		0		1		60		49		109	
02:30	0		0		0		56		44		100	
02:45	1	6	1	4	2	10	62	226	42	180	104	406
03:00	3		0		3		66		56		122	
03:15	0		0		0		49		47		96	
03:30	2		1		3		45		55		100	
03:45	1	6	1	2	2	8	59	219	43	201	102	420
04:00	0		0		0		61		36		97	
04:15	1		2		3		60		42		102	
04:30	1		0		1		55		43		98	
04:45	2	4	1	3	3	7	72	248	59	180	131	428
05:00	5		1		6		69		71		140	
05:15	0		1		1		66		58		124	
05:30	8		1		9		75		61		136	
05:45	4	17	7	10	11	27	67	277	52	242	119	519
06:00	10		9		19		72		64		136	
06:15	6		17		23		54		53		107	
06:30	11		21		32		58		50		108	
06:45	14	41	27	74	41	115	58	242	54	221	112	463
07:00	10		22		32		54		54		108	
07:15	19		36		55		56		45		101	
07:30	16		59		75		53		43		96	
07:45	30	75	44	161	74	236	51	214	45	187	96	401
08:00	32		32		64		59		36		95	
08:15	24		38		62		59		45		104	
08:30	23		40		63		53		32		85	
08:45	23	102	36	146	59	248	56	227	33	146	89	373
09:00	38		35		73		42		30		72	
09:15	34		31		65		40		30		70	
09:30	35		37		72		33		22		55	
09:45	30	137	38	141	68	278	32	147	19	101	51	248
10:00	34		39		73		26		15		41	
10:15	24		54		78		15		22		37	
10:30	43		35		78		20		13		33	
10:45	42	143	34	162	76	305	16	77	11	61	27	138
11:00	41		51		92		15		12		27	
11:15	45		42		87		8		9		17	
11:30	49		38		87		7		4		11	
11:45	61	196	58	189	119	385	3	33	7	32	10	65
Totals	753		913		1666		2382		1968		4350	
Split %	45.2%		54.8%				54.7%		45.2%			
Peak Hour	11:00		11:00		11:00		04:45		04:45		04:45	
Volume	196		189		385		282		249		531	
P.H.F.	.80		.81		.80		.94		.87		.94	

Total: 6016

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*jp*
Agency/Co.	*Blue Ash*
Date Performed	*8/25/2005*
Analysis Time Period	*PM peak*

Site Information

Intersection	*Cooper at Blue Ash Road*
Jurisdiction	*City of Blue Ash*
Analysis Year	*2004*

Project Description *2003125 existing geometry*

East/West Street: *Cooper* | North/South Street: *Blue Ash Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*0*	*402*	*170*	*155*	*341*	*0*
Peak-hour factor, PHF	*1.00*	*0.87*	*0.87*	*0.91*	*0.91*	*1.00*
Hourly Flow Rate (veh/h)	*0*	*462*	*195*	*170*	*374*	*0*
Proportion of heavy vehicles, P_{HV}	*0*	–	–	*0*	–	–
Median type	*Undivided*					
RT Channelized?			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*46*	*0*	*99*	*0*	*0*	*0*
Peak-hour factor, PHF	*0.79*	*1.00*	*0.79*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate (veh/h)	*58*	*0*	*125*	*0*	*0*	*0*
Proportion of heavy vehicles, P_{HV}	*0*	*0*	*0*	*0*	*0*	*0*
Percent grade (%)		*0*			*0*	
Flared approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized?			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
Volume, v (vph)		*170*		*183*				
Capacity, c_m (vph)		*940*		*297*				
v/c ratio		*0.18*		*0.62*				
Queue length (95%)		*0.66*		*3.80*				
Control Delay (s/veh)		*9.7*		*34.8*				
LOS		*A*		*D*				
Approach delay (s/veh)	--	--	*34.8*					
Approach LOS	--	--	*D*					

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	jp
Agency/Co.	Blue Ash
Date Performed	8/25/2005
Analysis Time Period	PM peak

Site Information

Intersection	Cooper at Blue Ash Road
Jurisdiction	City of Blue Ash
Analysis Year	2004

Project Description 2003125 with proposed NB right turn lane

East/West Street: Cooper | North/South Street: Blue Ash Road

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

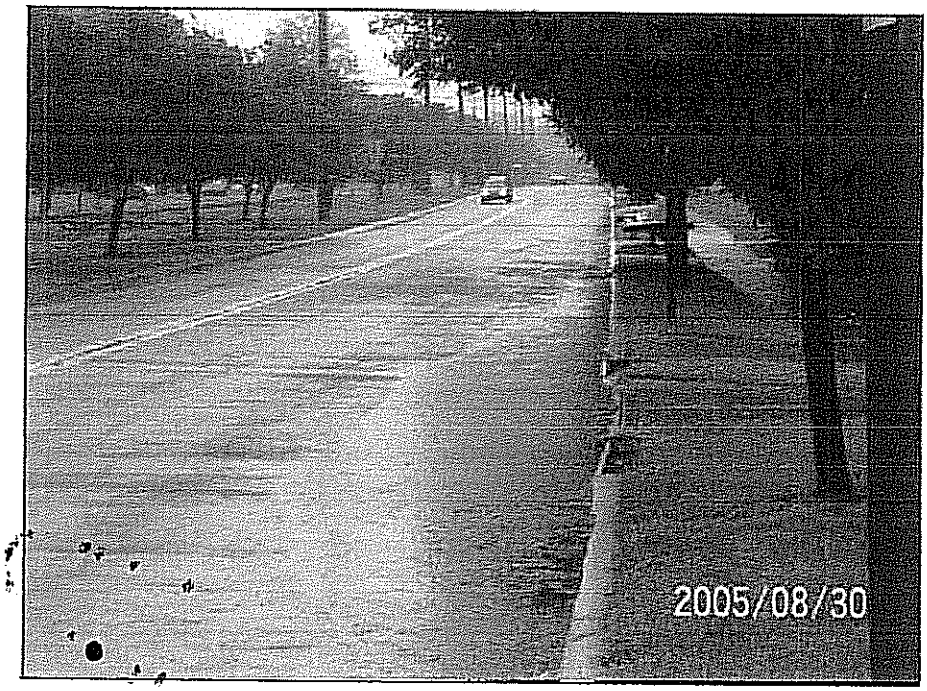
Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	0	402	170	155	341	0
Peak-hour factor, PHF	1.00	0.87	0.87	0.91	0.91	1.00
Hourly Flow Rate (veh/h)	0	462	195	170	374	0
Proportion of heavy vehicles, P_{HV}	0	--	--	0	--	--
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	46	0	99	0	0	0
Peak-hour factor, PHF	0.79	1.00	0.79	1.00	1.00	1.00
Hourly Flow Rate (veh/h)	58	0	125	0	0	0
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			0	
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	1	0	1	0	0	0
Configuration	L		R			

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT	L		R			
Volume, v (vph)		170	58		125			
Capacity, c_m (vph)		940	152		532			
v/c ratio		0.18	0.38		0.23			
Queue length (95%)		0.66	1.63		0.91			
Control Delay (s/veh)		9.7	42.6		13.8			
LOS		A	E		B			
Approach delay (s/veh)	--	--	23.0					
Approach LOS	--	--	C					

Blue Ash Road
City of Blue Ash



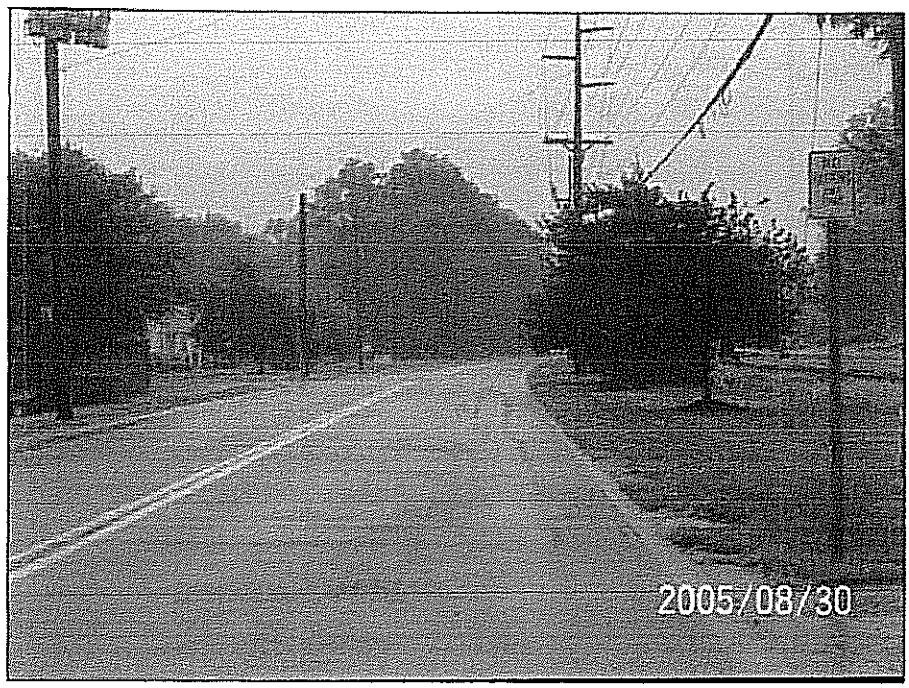
Blue Ash Road north of Ronald Reagan Hwy.
Two inlets not taking the water.

Blue Ash Road
City of Blue Ash

Blue Ash Road south of Ronald Reagan Hwy.
Water in the traveled lanes of traffic due to inadequate drainage.

Blue Ash Road north of Ronald Reagan Hwy.
Water backing up in the curb due to the inlets not taking the water.

Blue Ash Road
City of Blue Ash



Blue Ash Road south of Cooper.
The water can't stay within the curb due to inadequate stormwater collection system.

Blue Ash Road south of Cooper.
Lack of stormwater inlets cause the curbs to over flow.

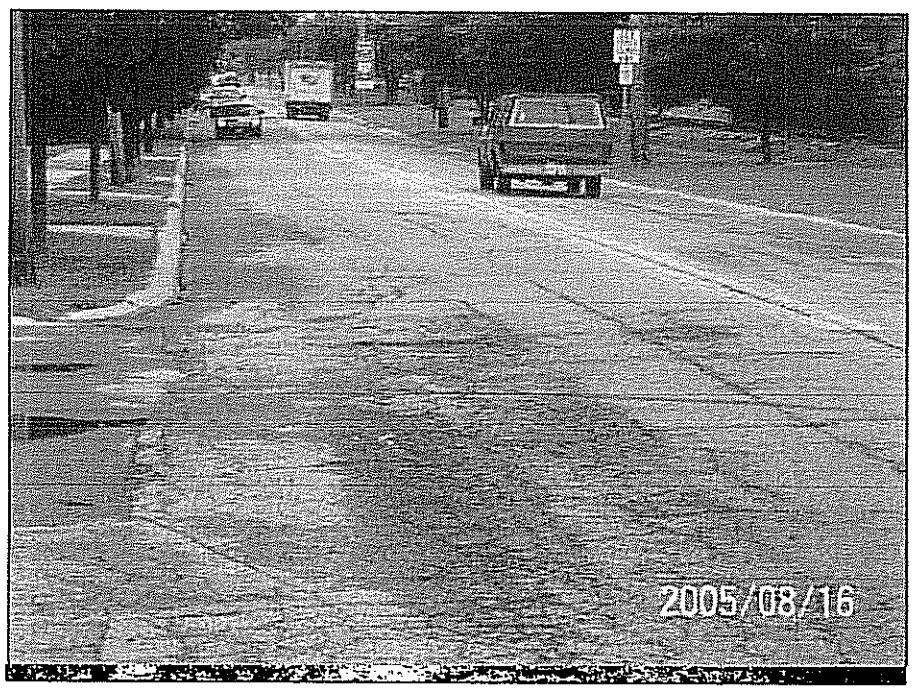
Blue Ash Road
City of Blue Ash

Blue Ash Road north of Ronald Reagan Hwy.
Pot holes and raveling with severe alligator cracking.

Blue Ash Road south of Cooper Road.
Deficient crack seal, random cracking. Reflective transverse joint and alligator cracking.

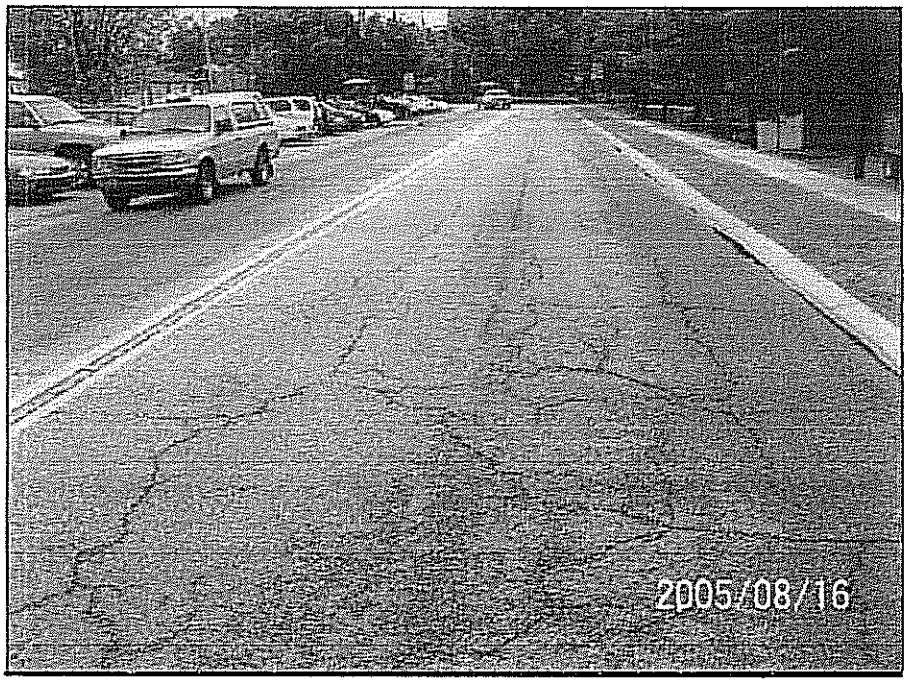
Blue Ash Road
City of Blue Ash

Blue Ash Road south of Hunt Road.
Roadway patch. Notice random cracking and rutting.



Blue Ash Road at Tillsam Ct.
Alligator cracking with raveling,and pot holes.

Blue Ash Road
City of Blue Ash



Blue Ash Road south of Cooper.
Alligator cracking with evidence of base failure.

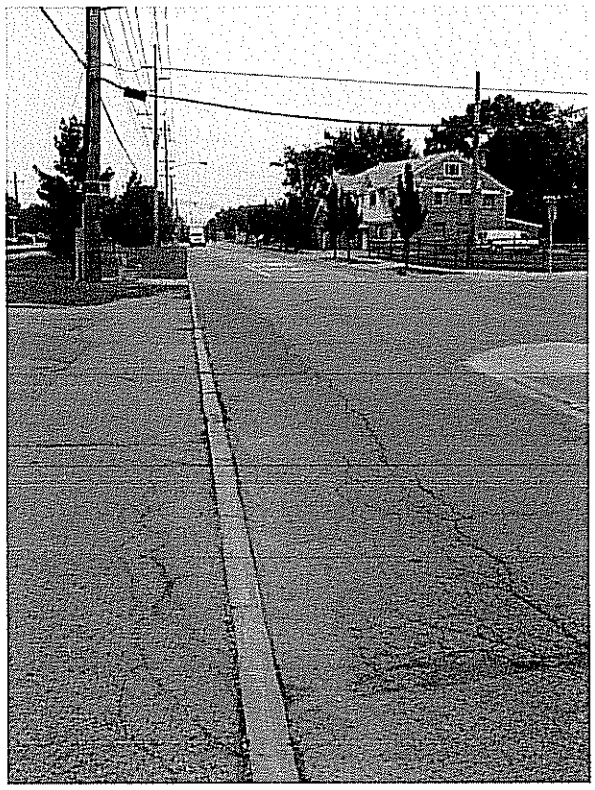
Blue Ash Road North of Hunt Road.
Alligator cracking with concrete gutter paved over.

BLUE ASH AND HUNT ROAD IMPROVEMENTS
CITY OF BLUE ASH

Blue Ash Road looking south from Ronald Reagan Hwy Bridge.
Project to extend sidewalk through interchange area

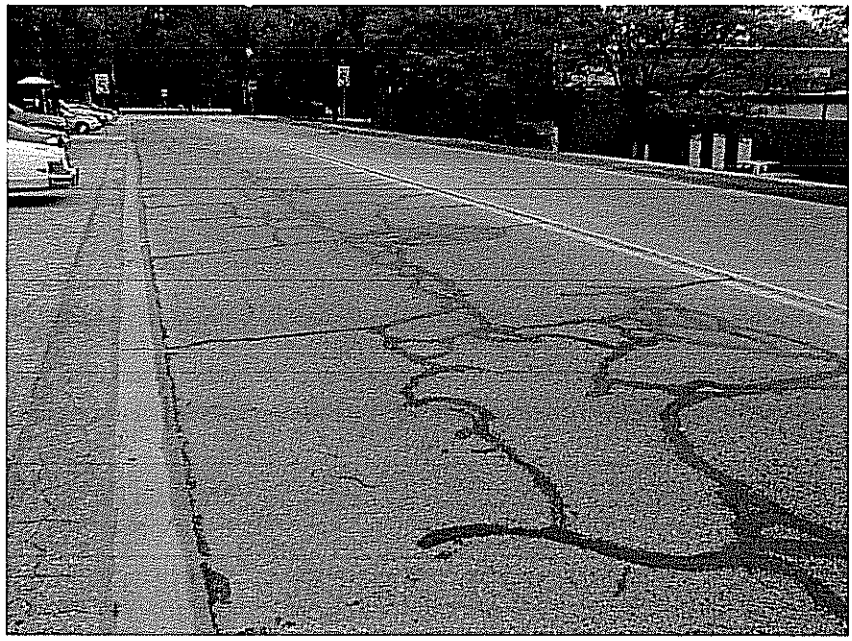
BLUE ASH AND HUNT ROAD IMPROVEMENTS
CITY OF BLUE ASH

Blue Ash Road south of Hunt Road.
Roadway patching at utility manhole. Random cracking may be caused by a shattered concrete slab.



Blue Ash Road south of Ronald Reagan Hwy.
Longitudinal cracking with minor raveling. Roadway patching in background.

BLUE ASH AND HUNT ROAD IMPROVEMENTS
CITY OF BLUE ASH

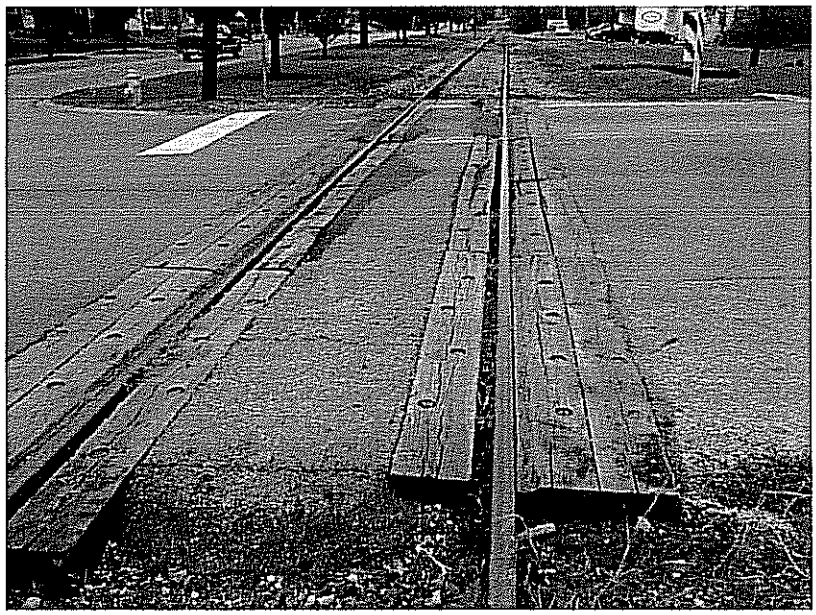


Blue Ash Road south of Cooper Road.
Deficient crack seal, random cracking. Reflective transverse reflection joint cracking. Notice the concrete gutter is paved over.

Blue Ash Road south of Hunt Road.
Roadway patch. Notice random cracking and minor rutting.

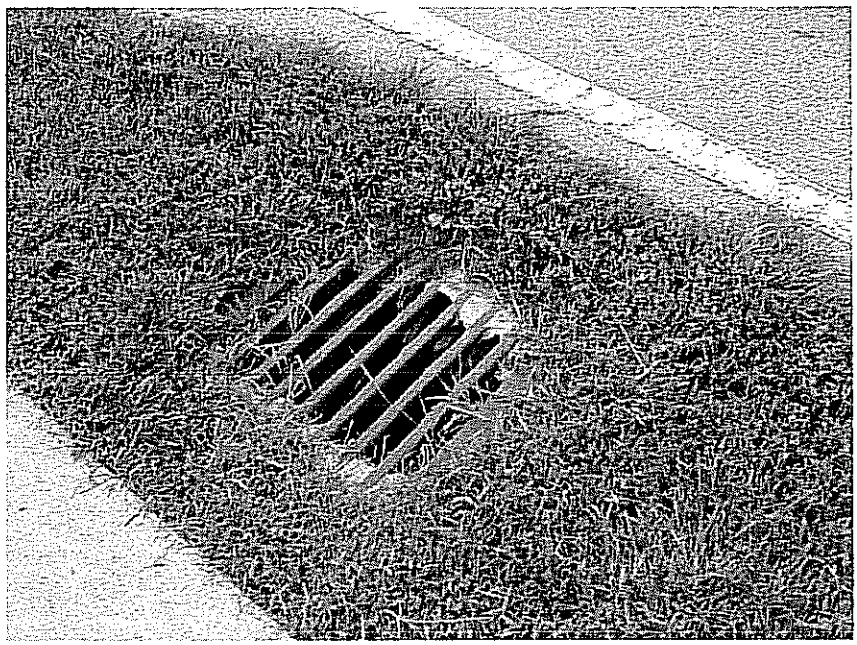
BLUE ASH AND HUNT ROAD IMPROVEMENTS
CITY OF BLUE ASH

Blue Ash Road south of Ronald Reagan Hwy.
Longitudinal cracking with extensive roadway patching deficient crack seal. Pothole in background.



Railroad track crossing at Hunt Road.

BLUE ASH AND HUNT ROAD IMPROVEMENTS
CITY OF BLUE ASH



Hunt Road west of Highland Ave.
Substandard yard inlet

Hunt Road east of Flora Ave.
Inlet in driveway, notice the "curbing" on driveway to direct water to catch basin instead of traveling down driveway to house.

BLUE ASH AND HUNT ROAD IMPROVEMENTS
CITY OF BLUE ASH

Hunt Road east of Flora Ave. (Picture taken before asphalt overlay)
Yard inlet; notice the "curbing" on driveway to inlet.

Hunt Road east of Flora Ave.(Picture taken before asphalt overlay)
Roadway patching due to utility cuts.

Metro
Southwest Ohio Regional Transit Authority

Planning
and
Scheduling
Department

September 8, 2006

Mr. Greg Bell
CDS Associates, Inc.
11120 Kenwood Road
Cincinnati, Ohio 45242

Dear Mr. Bell:

The Southwest Ohio Regional Transit Authority (SORTA), more commonly known as The Metro, operates fixed route public transit service on five of the nine street segments listed in the letter that you sent to me. These road segments that are served by Metro are as follows:

On Harrison Avenue between Lovell and the Cheviot east corporation line

This road segment is served by Metro Route 21, Harrison Avenue and by Metro Route 40X, Montana Express. The combined estimated daily ridership on weekdays for these two routes is 3,300 passengers. We estimate that about 300 passengers per day travel through this specific street segment on Metro service.

On Blue Ash Road between Cooper Road and the Blue Ash south corporation line

This road segment is served by Metro Route 3X, Montgomery Express and Metro Route 3, Montgomery Job Connection. The combined estimated daily ridership on weekdays for these two routes is 500 passengers. We estimate that about 100 passengers per day travel through this specific street segment on Metro service.

The intersection of Plainfield Road and Montgomery Road

This road segment is served by Metro Route 3, Montgomery Job Connection, Metro Route 4, Blue Ash and Metro Route 4 Kenwood. The combined estimated daily ridership on weekdays for these routes is 7,100 passengers. We estimate that about 800 passengers per day travel through this intersection on Metro service.

1401 Bank Street
Cincinnati, Ohio 45214-1782
(513) 632-7543
FAX (513) 632-7694

On Main Street in Addyston between First Street and Lawland Road

This road segment is served by Metro Route 50, Saylor Park. The estimated daily ridership on weekdays for Route 50 is 1,200 passengers. We estimate that about 20 passengers per day travel through this street segment on Metro service.

On Anthony Wayne Avenue between Marion Road and the Woodlawn south corporation line

This road segment is served by Metro Route 78, Woodlawn. The estimated daily ridership on weekdays for Route 78 is 3,800 passengers. We estimate that about 50 passengers per day travel through this street segment on Metro service.

Thanks for your interest in Metro service. If I can be of any further assistance, please let me know. Additional information about all Metro service is available at www.go-metro.com.

Sincerely,

Ted C. Meyer
Manager of Planning & Scheduling

ADDITIONAL SUPPORT INFORMATION

For Program Year 2006 (July 1, 2006 through June 30, 2007), jurisdictions shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items, as noted, is required. The applicant shall also use the rating system and its' addendum as a guide. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

IF YOU ARE APPLYING FOR A GRANT, WILL YOU BE WILLING TO ACCEPT A LOAN IF ASKED BY THE DISTRICT? ___X___ YES _____ NO (ANSWER REQUIRED)

Note: Answering "Yes" will not increase your score and answering "NO" will not decrease your score.

1) What is the condition of the existing infrastructure that is to be replaced or repaired?

Give a brief statement of the deficient conditions of the present facility exclusive of capacity, serviceability, health and/or safety issues. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded. Use documentation (if possible) to support your statement. Documentation may include (but is not limited to): ODOT BR86 reports, pavement management condition reports, televised underground system reports, age inventory reports, maintenance records, etc., and will only be considered if included in the original application. Examples of deficiencies include: structural condition; substandard design elements such as widths, grades, curves, sight distances, drainage structures, etc.

The condition of Blue Ash Road has failed. The geotechnical report show the concrete base to be severely fractured and recommends replacement or rubbelization (see attached). Portions of Hunt Road and Blue Ash Road were temporarily patched or resurfaced in 2004. These repairs were done to provide a "band-aid" until more extensive rehabilitation / replacement work can be done. The existing storm sewer along Blue Ash Road services the residential area (85 AC) north of Hunt Road and west of Blue Ash Road. This system is deteriorated and undersized and no longer effectively serving in the area. In addition, the local system is a myriad of storm inlets and pipes that are placed randomly and not effective for the drainage patterns. Video logs have been provided to document the deteriorated storm sewer condition (see attached). The entire storm sewer system requires replacement.

2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the safety of the service area. The design of the project is intended to reduce existing accident rate, promote safer conditions, and reduce the danger of risk, liability or injury. (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, and highway capacity). Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

As part of the project, new signage and stripping will be installed per MUTCD guidelines. The project will provide a safer roadway due to the elimination of surface irregularities. Restoring curb and gutter capacity and inlet spacing will provide better drainage and safer pavement. There currently is above average rates of failure, to yield type accidents at Blue Ash Road and Hunt Road intersections. The signage improvements to the Blue Ash Road and Hunt Road railroad track intersection should help reduce accident occurrence in the area (see attached Accident Analysis Report). Greater Cincinnati Water Works will install a 36" watermain to improve pressure, service, and fire protection in 2007.

3) How important is the project to the health of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the health of the service area. The design of the project will improve the overall condition of the facility so as to reduce or eliminate potential for disease, or correct concerns regarding the environmental health of the area. (Typical examples may include the effects of the completed project by improving or adding storm drainage or sanitary facilities, replacing lead jointed water lines, etc.). Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

The improvements to the local drainage system will reduce isolated water ponding in yards. Basement flooding along Hunt Road will be reduced by providing a properly engineered stormwater collection and conveyance system in the public right-of-way.

4) Does the project help meet the infrastructure repair and replacement needs of the applying jurisdiction?

The jurisdiction must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance.

Priority 1 Blue Ash Road and Hunt Road Improvements

Priority 2 _____

Priority 3 _____

Priority 4 _____

Priority 5 _____

5) To what extent will the user fee funded agency be participating in the funding of the project?

(example: rates for water or sewer, frontage assessments, etc.).

None

6) Economic Growth - How will the completed project enhance economic growth?

Give a statement of the projects effect on the economic growth of the service area (be specific).

The improvements to Blue Ash Road will help sustain economic viability for existing businesses located along the corridor. The City's downtown revitalization plan calls for invigorating residential / retail areas adjacent to the downtown area. The roadway and storm sewer improvements will support potential redevelopment along the Blue Ash corridor north of Ronald Reagan Highway.

7) Matching Funds - LOCAL

The information regarding local matching funds is to be filed by the applicant in Section 1.2 (b) of the Ohio Public Works Association's "Application for Financial Assistance" form.

8) Matching Funds - OTHER

The information regarding local matching funds is to be filed by the applicant in Section 1.2 (c) of the Ohio Public Works Association's "Application for Financial Assistance" form. If MRF funds are being used for matching funds, the MRF application must be filed by August 31st of this year for this project with the Hamilton County Engineer's Office. List below, the source(s) of all "other" funding

MRF funding - 3%

Greater Cincinnati Water Works (GCWW) - 1%

9) Will the project alleviate serious capacity problems or respond to the future level of service needs of the District?

Describe how the proposed project will alleviate serious capacity problems (be specific).

The project will provide a dedicated right turn lane from northbound Blue Ash Road to eastbound Cooper Road. The right turn lane will reduce delay at the intersection. Based on today's PM peak traffic volumes the LOS will be improved from 'D' to 'C'.

For roadway betterment projects, provide the existing and proposed Level of Service (LOS) of the facility using the methodology outlined within AASHTO's "Geometric Design of Highways and Streets" and the 1985 Highway Capacity Manual.

Existing LOS N/A Proposed LOS N/A

If the proposed design year LOS is not "C" or better, explain why LOS "C" cannot be achieved.

N/A

10) IF SCIP / LTIP funds are granted, when would the construction contract be awarded?

If SCIP / LTIP funds are awarded, how soon after receiving the Project Agreement from OPWC (tentatively set for July 1, of this year following the deadline for applications) would the project be under contract? The Support Staff will review status reports of previous projects to help judge the accuracy of a jurisdiction's anticipated project schedule.

Number of Months 6

a.) Are preliminary plans or engineering completed? Yes x No N/A

b.) Are detailed construction plans completed? Yes x (60%) No N/A

c.) Are all utility coordination's completed? Yes No x N/A

d.) Are all right-of-way and easements acquired (if applicable)? Yes No x N/A

If no, how many parcels needed for project? 12 Of these, how many are: Takes
Temporary 12
Permanent 4

For any parcels not yet acquired, explain the status of the ROW acquisition process for this project.

Once final design is complete, drainage and temporary construction easement needs will be determined. If funding is obtained all easements will be acquired by November 30, 2007.

e.) Give an estimate of time needed to complete any item above not yet completed. 11 Months.

11) Does the infrastructure have regional impact?
Give a brief statement concerning the regional significance of the infrastructure to be replaced, repaired, or expanded.

Blue Ash Road is an important minor arterial for traffic coming from Silverton, Sycamore Township and Deer Park to Ronald Reagan Highway. In addition, a Queen City Metro Park and Ride servicing the area is located on Blue Ash Road just south of Cooper Road.

12) What is the overall economic health of the jurisdiction?

The District 2 Integrating Committee predetermines the jurisdiction's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

13) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?

Describe what formal action has been taken which resulted in a ban of the use of or expansion of use for the involved infrastructure? Typical examples include weigh limits, truck restrictions, and moratoriums or limitations on issuance of building permits, etc. The ban must have been caused by a structural or operational problem to be considered valid. Submission of a copy of the approved legislation would be helpful.

N/A

Will the ban be removed after the project is completed? Yes_____ No_____ N/A__x____

14) What is the total number of existing daily users that will benefit as a result of the proposed project?

For roads and bridges, multiply current Average Daily Traffic (ADT) by 1.20. For inclusion of public transit, submit documentation substantiating the count. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to the restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by 4. User information must be documented and certified by a professional engineer or the jurisdictions' C.E.O.

Traffic:	ADT	10,184	x 1.20 =	12,220	Users
Public Transit Ridership:			=	100	Users
Water / Sewer:	Homes	260	x 4.00 =	1,040	Users

15) Has the jurisdiction enacted the optional $5.00 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure?

The applying jurisdiction shall list what type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for. (Check all that apply).

Operational $5.00 License Tax	YES	Specify type	Permissive Motor Vehicle License Fee
Infrastructure Levy		Specify type	
Facility Users Fee		Specify type	
Dedicated Tax		Specify type	
Other Fee, Levy or Tax		Specify type	

SCIP/LTIP PROGRAM
ROUND 21 - PROGRAM YEAR 2007
PROJECT SELECTION CRITERIA
JULY 1, 2007 TO JUNE 30, 2008

NAME OF APPLICANT: City of Blue Ash

NAME OF PROJECT: Blue Ash Rd & Hunt Rd Improvements

RATING TEAM: 1

General Statement for Rating Criteria

Points awarded for all items will be based on engineering experience, field verification, application information and other information supplied by the applying agency, which is deemed to be relevant by the Support Staff. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

CIRCLE THE APPROPRIATE RATING

1) **What is the physical condition of the existing infrastructure that is to be replaced or repaired?**

25 - Failed
23 - Critical
20 - Very Poor
17 - Poor
15 - Moderately Poor
(10 - Moderately Fair)
5 - Fair Condition
0 - Good or Better

Hunt Rd = 0 Hunt pipe = 20
BlueAsh (copper to Regan) = 15
BlueAsh (Regan to corp line) = 20

Appeal Score

17

Criterion 1 - Condition

Condition of the particular infrastructure to be repaired, reconstructed or replaced shall be a measure of the degree of reduction in condition from its original state. Capacity, serviceability, safety and health shall not be considered in this criterion. Any documentation the Applicant wishes to be considered must be included in the application package.

Definitions:

Failed Condition –requires complete reconstruction where no part of the existing facility is salvageable. (E.g. Roads: complete reconstruction of roadway, curbs and base; Bridges: complete removal and replacement of bridge; Underground: removal and replacement of an underground drainage or water system.

Critical Condition - requires partial reconstruction to maintain integrity. (E.g. Roads: reconstruction of roadway/curbs can be saved; Bridges: removal and replacement of bridge with abutment modification; Underground: removal and replacement of part of an underground drainage or water system.

Very Poor Condition - requires extensive rehabilitation to maintain integrity. (E.g. Roads: extensive full depth, partial depth and curb repair of a roadway with a structural overlay; Bridges: superstructure replacement; Underground: repair of joints and/or replacement of pipe sections.

Poor Condition - requires standard rehabilitation to maintain integrity. (E.g. Roads: moderate full depth, partial depth and curb repair to a roadway with no structural overlay needed or structural overlay with minor repairs to a roadway needed; Bridges: extensive patching of substructure and replacement of deck; Underground: insituform or other in ground repairs.

Moderately Poor Condition - requires minor rehabilitation to maintain integrity. (E.g. Roads: minor full depth, partial depth or curb repairs to a roadway with either a thin overlay or no overlay needed; Bridges: major structural patching and/or major deck repair.

Moderately Fair Condition - requires extensive maintenance to maintain integrity. (E.g. Roads: thin or no overlay with extensive crack sealing, minor partial depth and/or slurry or rejuvenation; Bridges: minor structural patching, deck repair, erosion control.)

Fair Condition - requires routine maintenance to maintain integrity. (E.g. Roads: slurry seal, rejuvenation or routine crack sealing to the roadway; Bridges: minor structural patching.)

Good or Better Condition - little to no maintenance required to maintain integrity.

Note: **If the infrastructure is in "good" or better condition, it will NOT be considered for SCIP/LTIP funding unless it is an expansion project that will improve serviceability.**

2) **How important is the project to the safety of the Public and the citizens of the District and/or service area?**

25 - Highly significant importance
20 - Considerably significant importance
15 - Moderate importance
10 - Minimal importance
5 - Poorly documented importance
0 - No measurable impact

Appeal Score _____

Criterion 2 – Safety
The applying agency shall include in its application the type, frequency, and severity of the safety problem that currently exists and how the intended project would improve the situation. For example, have there been vehicular accidents attributable to the problems cited? Have they involved injuries or fatalities? In the case of water systems, are existing hydrants non-functional? In the case of water lines, is the present capacity inadequate to provide volumes or pressure for adequate fire protection? **In all cases, specific documentation is required.** Mentioned problems, which are poorly documented, shall not receive more than 5 points.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply. **Examples given above are NOT intended to be exclusive.**

3) **How important is the project to the health of the Public and the citizens of the District and/or service area?**

25 - Highly significant importance
20 - Considerably significant importance
15 - Moderate importance
10 - Minimal importance
5 - Poorly documented importance
0 - No measurable impact

Appeal Score _____

Criterion 3 – Health
The applying agency shall include in its application the type, frequency, and severity of the health problem that would be eliminated or reduced by the intended project. For example, can the problem be eliminated only by the project, or would routine maintenance be satisfactory? If basement flooding has occurred, was it storm water or sanitary flow? What complaints if any are recorded? In the case of underground improvements, how will they improve health if they are storm sewers? How would improved sanitary sewers improve health or reduce health risk? **In all cases, quantified documentation is required.** Mentioned problems, which are poorly documented, shall not receive more than 5 points.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply. **Examples given above are NOT intended to be exclusive.**

4) **Does the project help meet the infrastructure repair and replacement needs of the applying agency?**
Note: Applying agency's priority listing (part of the Additional Support Information) must be filed with application(s).

25 - First priority project
20 - Second priority project
15 -Third priority project
10 - Fourth priority project
5 - Fifth priority project or lower

Appeal Score _____

Criterion 4 – Jurisdiction's Priority Listing
The applying agency must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance. The form is included in the Additional Support Information.

5) **To what extent will a user fee funded agency be participating in the funding of the project?**

10 – Less than 10%
9 – 10% to 19.99%
8 – 20% to 29.99%
7 – 30% to 39.99%
6 – 40% to 49.99%
5 – 50% to 59.99%
4 – 60% to 69.99%
3 – 70% to 79.99%
2 – 80% to 89.99%
1 – 90% to 95%
0 – Above 95%

Appeal Score _____

Criterion 5 – User Fee-funded Agency Participation
To what extent will a user fee funded agency be participating in the funding of the project? (Example: rates for water or sewer, frontage assessments, etc.). The applying agency must submit documentation.

6) **Economic Growth – How the completed project will enhance economic growth (See definitions).**

10 – The project will directly secure new employment
5 – The project will permit more development
0 – The project will not impact development

Appeal Score _____

Criterion 6 – Economic Growth
Will the completed project enhance economic growth and/or development in the service area?
Definitions:
Secure new employment: The project as designed will secure development/employers, which will immediately add new permanent employees to the jurisdiction. The applying agency must submit details.
Permit more development: The project as designed will permit additional business development/employment. The applying agency must supply details.
The project will not impact development: The project will have no impact on business development.

Note: **Each project is looked at on an individual basis to determine if any aspects of this category apply.**

7) **Matching Funds - LOCAL**

10 - This project is a loan or credit enhancement
10 – 50% or higher
8 – 40% to 49.99%
6 – 30% to 39.99%
4 – 20% to 29.99%
2 – 10% to 19.99%
0 – Less than 10%

List total percentage of "Local" funds 53 %

Criterion 7 – Matching Funds – Local

The percentage of matching funds which come directly from the budget of the applying agency. Ten points shall be awarded if a loan request is at least 50% of the total project cost. (If the applying agency is not a user fee funded agency, any funds to be provided by a user fee generating agency will be considered "Matching Funds – Other")

8) Matching Funds – OTHER

List total percentage of "Other" funds 3.3 %

10 – 50% or higher
8 – 40% to 49.99%
6 – 30% to 39.99%
4 – 20% to 29.99%
2 – 10% to 19.99%
(1) – 1% to 9.99%
0 – Less than 1%

List below each funding source and percentage

MRF	3.3 %
	%
	%
	%
	%

Criterion 8 – Matching Funds - Other

The percentage of matching funds that come from funding sources other than those mentioned in Criterion 7. A letter from the outside funding agency stating their financial participation in the project and the amount of funding is required to receive points. For MRF, a copy of the current application form filed with the Hamilton County Engineer's Office meets the requirement.

9) **Will the project alleviate serious capacity problems or hazards or respond to the future level of service needs of the district?**

10 - Project design is for future demand.
8 - Project design is for partial future demand.
6 - Project design is for current demand.
4 - Project design is for minimal increase in capacity.
(2) - Project design is for no increase in capacity.

Appeal Score _____

Criterion 9 – Alleviate Capacity Problems

The applying agency shall provide a narrative, along with pertinent support documentation, which describe the existing deficiencies and showing how congestion will be reduced or eliminated and how service will be improved to meet the needs of any expected growth or development. A formal capacity analysis accompanying the application would be beneficial. Projected traffic or demand should be calculated as follows:

Formula:

Existing users x design year factor = projected users

Design Year	Design year factor		
	Urban	Suburban	Rural
20	1.40	1.70	1.60
10	1.20	1.35	1.30

Definitions:

Future demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for twenty-year projected demand or fully developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

Partial future demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for ten-year projected demand or partially developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

Current demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service only for existing demand and conditions.

Minimal increase – Project will reduce but not eliminate existing congestion or deficiencies and will provide a minimal but less than sufficient increase in existing capacity or service for existing demand and conditions.

No increase – Project will have no effect on existing congestion or deficiencies and provide no increase in capacity or service for existing demand and conditions.

10) **Readiness to Proceed - If SCIP/LTIP funds are granted, when would the construction contract be awarded?**

5 - Will be under contract by December 31, 2007 and no delinquent projects in Rounds 18 & 19
3 - Will be under contract by March 31, 2008 and/or one delinquent project in Rounds 18 & 19
0 - Will not be under contract by March 31, 2008 and/or more than one delinquent project in Rounds 18 & 19

Criterion 10 – Readiness to Proceed
The Support Staff will assign points based on engineering experience and status of design plans. A project is considered delinquent when it has not received a notice to proceed within the time stated on the original application and no time extension has been granted by the OPWC. An applying agency receiving approval for a project and subsequently canceling the same after the bid date on the application will receive zero (0) points under this round and the following round.

11) **Does the infrastructure have regional impact? Consider origination and destination of traffic, functional classifications, size of service area, and number of jurisdictions served, etc.**

10 – Major Impact
8 – Significant Impact
6 – Moderate Impact
4 – Minor Impact
2 – Minimal or No Impact

Appeal Score

_____

Criterion 11 - Regional Impact
The regional significance of the infrastructure that is being repaired or replaced.
Definitions:

Major Impact – Roads: Major Arterial: A direct connector to an Interstate Highway; Arterials are intended to provide a greater degree of mobility rather than land access. Arterials generally convey large traffic volumes for distances greater than one mile. A major arterial is a highway that is of regional importance and is intended to serve beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic.

Significant Impact – Roads: Minor Arterial: A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials.

Moderate Impact – Roads: Major Collector: A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers and carries moderate traffic volumes over moderate distances (generally less than one mile). Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets.

Minor Impact – Roads: Minor Collector: A roadway similar in functions to a major collector but which carries lower traffic volumes over shorter distances and has a higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets and may, or may not, be through streets.

Minimal or No Impact - Roads: Local: A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials.

12) **What is the overall economic health of the jurisdiction?**

10 Points
8 Points
6 Points
(4 Points)
2 Points

Criterion 12 – Economic Health
The District 2 Integrating Committee predetermines the applying agency's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

13) **Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?**

10 - Complete ban, facility closed
8 – 80% reduction in legal load or 4-wheeled vehicles only
7 – Moratorium on future development, *not* functioning for current demand
6 – 60% reduction in legal load
5 - Moratorium on future development, functioning for current demand
4 – 40% reduction in legal load
2 – 20% reduction in legal load
(0 – Less than 20% reduction in legal load)

Appeal Score _____

Criterion 13 - Ban
The applying agency shall provide documentation to show that a facility ban or moratorium has been formally placed. The ban or moratorium must have been caused by a structural or operational problem. Points will only be awarded if the end result of the project will cause the ban to be lifted.

14) **What is the total number of existing daily users that will benefit as a result of the proposed project?**

10 - 16,000 or more
(8 - 12,000 to 15,999)
6 - 8,000 to 11,999
4 - 4,000 to 7,999
2 - 3,999 and under

Appeal Score _____

Criterion 14 - Users
The applying agency shall provide documentation. A registered professional engineer or the applying agency's C.E.O must certify the appropriate documentation. Documentation may include current traffic counts, households served, when converted to a measurement of persons. Public transit users are permitted to be counted for the roads and bridges, but only when certifiable ridership figures are provided.

15) **Has the applying agency enacted the optional $5 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure?** ***(Provide documentation of which fees have been enacted.)***

5 - Two or more of the above
(3 - One of the above)
0 - None of the above

Appeal Score _____

Criterion 15 – Fees, Levies, Etc.
The applying agency shall document (in the "Additional Support Information" form) which type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for.

PAVEMENT EVALUATION

BLUE ASH ROAD

BLUE ASH, OHIO

Prepared for: CDS Associates, Inc.
Thelen Project No.: 031400NEJ

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers

○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
✓ 2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756
www.thelenassoc.com

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January 16, 2004

CDS Associates, Inc.
11120 Kenwood Road
Cincinnati, Ohio 45242-1818

Attention: Mr. Tim Casto

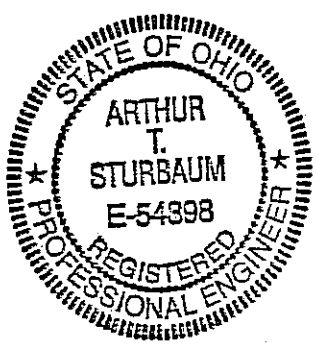
Re: Pavement Evaluation
Blue Ash Road
Blue Ash, Ohio

Ladies and Gentlemen:

Enclosed herein is our pavement and subgrade evaluation report for improvements proposed for Blue Ash Road in Blue Ash, Ohio. Our services were requested by Mr. Tim Casto, CDS Associates, Inc. (CDS), and authorized with a signed Proposal-Agreement J23160 by Mr. Mark Kluesener, CDS, on December 24, 2003.

We are enclosing with this report a reprint of "Important Information About Your Geotechnical Engineering Report" published by ASFE, Professional Firms Practicing in the Geosciences, which our firm would like to introduce to you at this time.

We appreciate the opportunity to provide the pavement evaluation for this project. Should you have any questions concerning the information, conclusions or recommendations contained in this report, or if we may be of additional assistance to you during the design or construction of the project, please do not hesitate to contact us.



Respectfully submitted,
THELEN ASSOCIATES, INC.

Kevin D. Weaver, E.I.
Materials/Staff Engineer

1/16/04
Arthur T. Sturbaum, P.E.
Senior Geotechnical Engineer

KDW:ATS:bkm
031400NEJ

Copies submitted: 2 - Client

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January 16, 2004

PAVEMENT EVALUATION
BLUE ASH ROAD
BLUE ASH, OHIO

1.0 INTRODUCTION

This report consists of a pavement evaluation performed along Blue Ash Road from Cooper Road to Belleview Avenue in Blue Ash, Ohio. The pavement evaluation was accomplished by performing an engineering reconnaissance of the site as well as the completion of four (4) pavement cores with base thickness measurements and shallow subgrade soil sampling.

2.0 SCOPE

The purpose of this evaluation was determine the condition of the existing pavement and subgrade soils and to relate their engineering properties, that is their thickness, strength, classification and compressibility characteristics to serviceability of the present street and to provide limited recommendations pertaining to potential improvements.

3.0 PROJECT CHARACTERISTICS & RECONNAISSANCE

This section of Blue Ash Road is currently under consideration for rehabilitation. To our knowledge, it has yet to be determined whether rehabilitation will consist of complete removal and replacement of the pavements or if existing pavements may be improved by an overlay. This section of Blue Ash Road consists of asphaltic concrete underlain by Portland cement concrete. The asphaltic concrete surface varies from poor to fair in condition based on visual observation. This section of Blue Ash Road appears to have

A bag sample was obtained from an offset hole located 20.0 feet west of Core 2 from 0.5 feet to 2.0 feet below the ground surface. This native soil was found to have an Atterberg liquid limit of 62 percent and plasticity index of 39 percent. This soil contained 1.1 percent gravel-size particles, 10.7 percent sand-size particles and 88.2 percent silt and clay-size particles by weight. This material classifies as CH, according to the Unified Soil Classification System (USCS) and A-7-6, according to the American Association of State Highway and Transportation Officials (AASHTO). A standard Proctor moisture-density test, ASTM D698 (AASHTO T-99) was performed on the soil sample obtained in the offset hole. The soil has a maximum dry density of 104.0 pcf at an optimum moisture content of 16.9 percent. This native clay had an in situ moisture content of 28.6 percent. For the purposes of preparing a pavement design a California Bearing Ratio (CBR) test was performed on this bag sample. The sample was remolded to 97.3 percent of maximum Proctor density to better approximate the existing in situ densities. The sample yielded a CBR value of 4.48 psi at 0.1 inches of penetration.

The Drilling Technician did not note that groundwater was present during sampling or at the completion of sampling for any of the pavement cores. Water was introduced to the core to facilitate coring. The test borings were immediately backfilled and patched with cold-patch asphalt.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 General

Based upon our engineering reconnaissance of the site, the pavement cores, a visual examination of the samples, the laboratory tests, our understanding of the proposed construction, and our experience as Consulting Soil Engineers in the Greater Cincinnati Area, we have reached the following conclusions and make the following recommendations.

The conclusions and recommendations of this report have been derived by relating the general principles of the discipline of Geotechnical Engineering to the proposed construction. Because changes in surface, subsurface, climatic and economic conditions can occur with time and location, we recommend for our mutual interest that the use of this report be restricted to this specific project.

We recommend that our office be retained to review the final design documents, plans and specifications, to assess any impact changes, additions or revisions in these documents may have on the conclusions and recommendations of this geotechnical report. Any changes or modifications which are made in the field during the construction phase which alter site grading, infrastructure or other related site work should also be reviewed by our office prior to their implementation.

If conditions are encountered in the field during construction which vary from the facts of this report, we recommend that our office be contacted immediately to review the changed conditions in the field and make appropriate recommendations.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, surface water, groundwater or air, on or below or around this site.

It is our understanding that the time frame for beginning and completing the rehabilitation work for this project will be continuous without interruption or delay. Should interruptions or delays occur, our office should be kept appraised to determine what recommendations must be modified accordingly.

We have performed the pavement cores and laboratory tests for our evaluation of the site conditions and for the formulation of the conclusions and recommendations of this report. We assume no responsibility for the interpretation or extrapolation of the data by others.

The recommendations of this report presume that the rehabilitation will be monitored by an Engineering Technician under the direction of a Registered Professional Geotechnical Engineer. We recommend that these services be contracted directly with Thelen Associates, Inc.

After you have had an opportunity to study this report and to discuss its implications, we recommend that a meeting be held between the members of the design team to review the plans and specifications in light of the report. This meeting should be held prior to submitting the contract documents in the market place for bidding

The existing pavement for this section of Blue Ash Road consists of 2.5 inches to 5.0 inches of asphaltic concrete underlain by 7.25 inches to 10.0 inches of Portland cement concrete. Numerous patches and utility cuts were noted throughout this section of roadway. The majority of the pavement distress is a result of the reflective cracking.

Because of the surface conditions of this section of Blue Ash Road along with the apparent maintenance evidenced by the patches, it is our opinion that the pavement sections are nearing the end of their design life. Proper reconditioning of the existing street will require either the removal of the existing pavements, reconditioning of the soil subgrades and the replacement of a new pavement section or the use of a "Rubblize and Roll" procedure described by the State of Ohio Department of Transportation (ODOT) Design Pavement and Rehabilitation Manual, Section 602.

7.2 Pavement Rehabilitation

The existing soil subgrade beneath the pavement is stiff to very stiff in consistency. Due to the in situ moisture contents these soils would require an excessive amount of time to dry the subgrade soils to prepare a suitable soil subgrade. Our recommendations for preparation of the soil subgrade surface is to proofroll the subgrade and undercut and

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CDS ASSOCIATES, INC.
PAVEMENT EVALUATION
BLUE ASH ROAD
BLUE ASH, OHIO
031400NEJ

TABULATION OF LABORATORY TESTS

Boring Number	Sample Number	Depth, in.		Moisture Content, %	Atterberg Limits, %			Gradation Analysis			Standard Proctor		Natural Dry Density, pcf	USCS/AASHTO Classification
		From	To		LL	PL	PI	Gravel	Sand	Silt & Clay	Max. Moisture (pcf)	Opt. Moisture		
1	PT-2	18.0	18.5	16.7									114.0	
2	PT-2	15.0	15.5	27.6									97.3	
3	PT-2	27.0	27.5	21.4									106.2	
4	PT-2	27.5	28.0	25.1									102.4	
	Bag	6	24	28.6	62	23	39	1.1	10.7	88.2	104.0	16.9		CH/A-7-6

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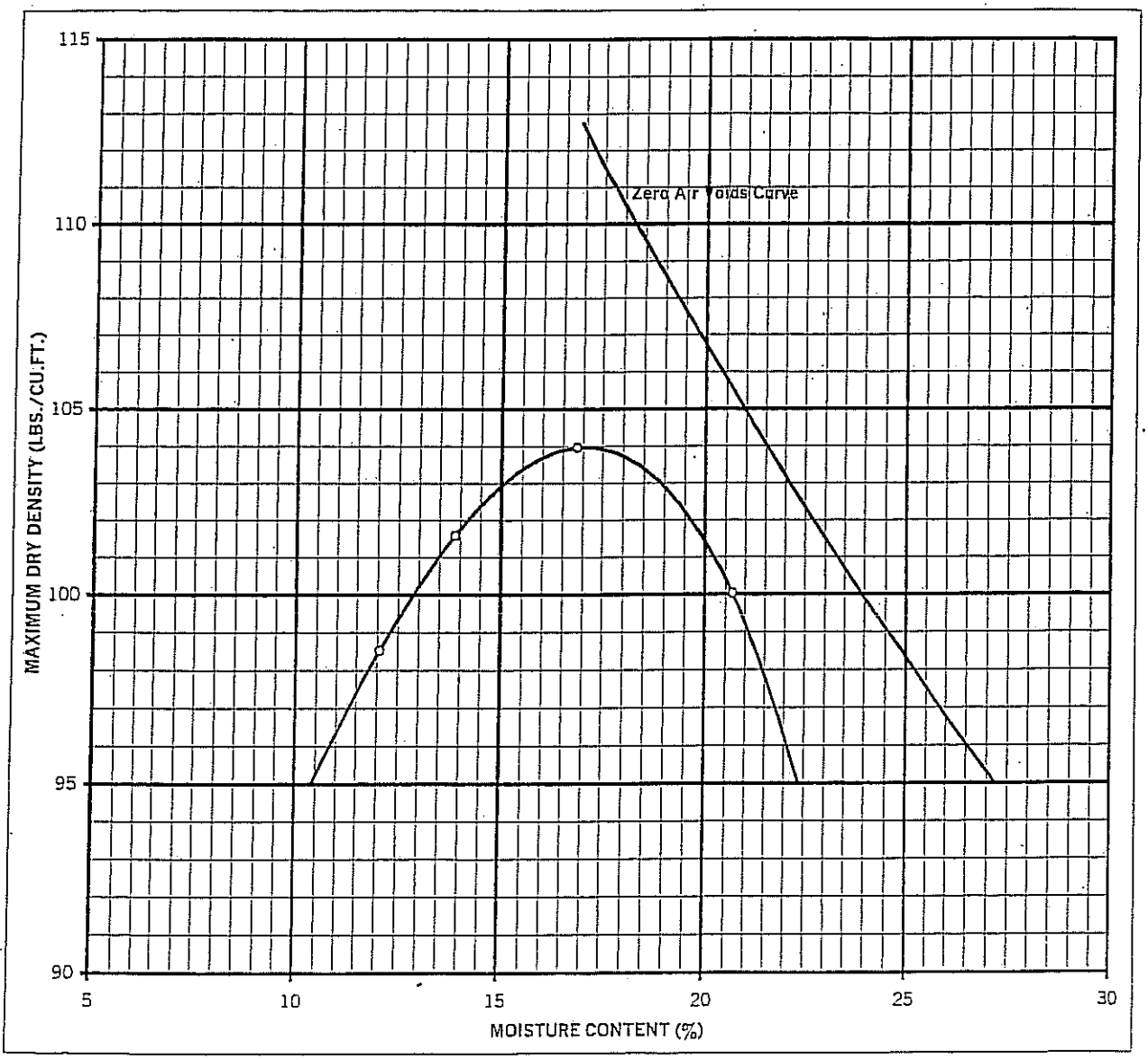
MOISTURE DENSITY TEST

Client :	CDS Associates, Inc.

Date :	01/06/03
Project No.	031400NEJ
Lab No :	030150N
Project :	Pavement Evaluation
	Blue Ash Road
	Blue Ash, Ohio

Sample Obtained From	On-Site, 20' West of Core No. 2		Depth : 0.5' - 2.0'
Sample Description :	Mottled brown, trace gray CLAY, little fine to coarse sand, trace fine gravel		
USCS Classification :	CH		AASHTO Classification: A-7-6
LL = 62	PL = 23	PI = 39	In Situ Moisture Content : 28.6%
Maximum Dry Density :	104.0 P.C.F.		Optimum Moisture Content 16.9 %
Test Type :	Standard Proctor, ASTM D698		
Method :	Method C		



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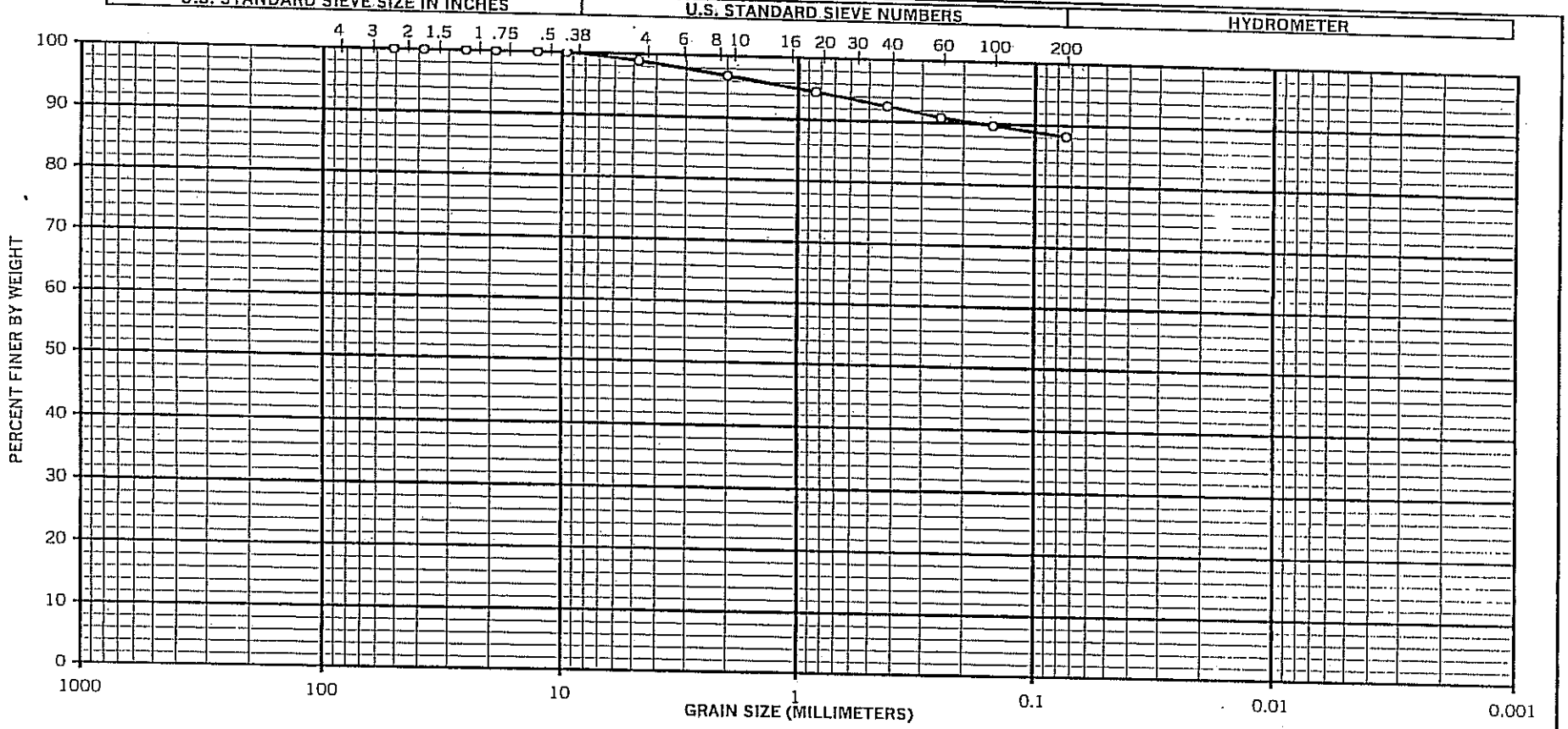
SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES ASTM C-136



BOULDER	COBBLE	GRAVEL		SAND			SILT	CLAY
		Coarse	Fine	Coarse	Medium	Fine		

Boring No.	Sample No.	Elev. or Depth	Description	Nat. w%	LL	PL	PI
Bag		0.5' - 2.0'	Mottled brown, trace gray CLAY, little fine to coarse sand, trace fine gravel	28.6	62	23	39
GRAVEL	SAND	SILT & CLAY	USCS CLASSIFICATION IS CH				
1.1%	10.7%	88.2%	AASHTO CLASSIFICATION IS A-7-6				
Specification							

Client :	CDS Associates, Inc.
Project :	Pavement Evaluation
	Blue Ash Road
	Blue Ash, Ohio
Project No.:	031400NEJ
Date :	01/12/04

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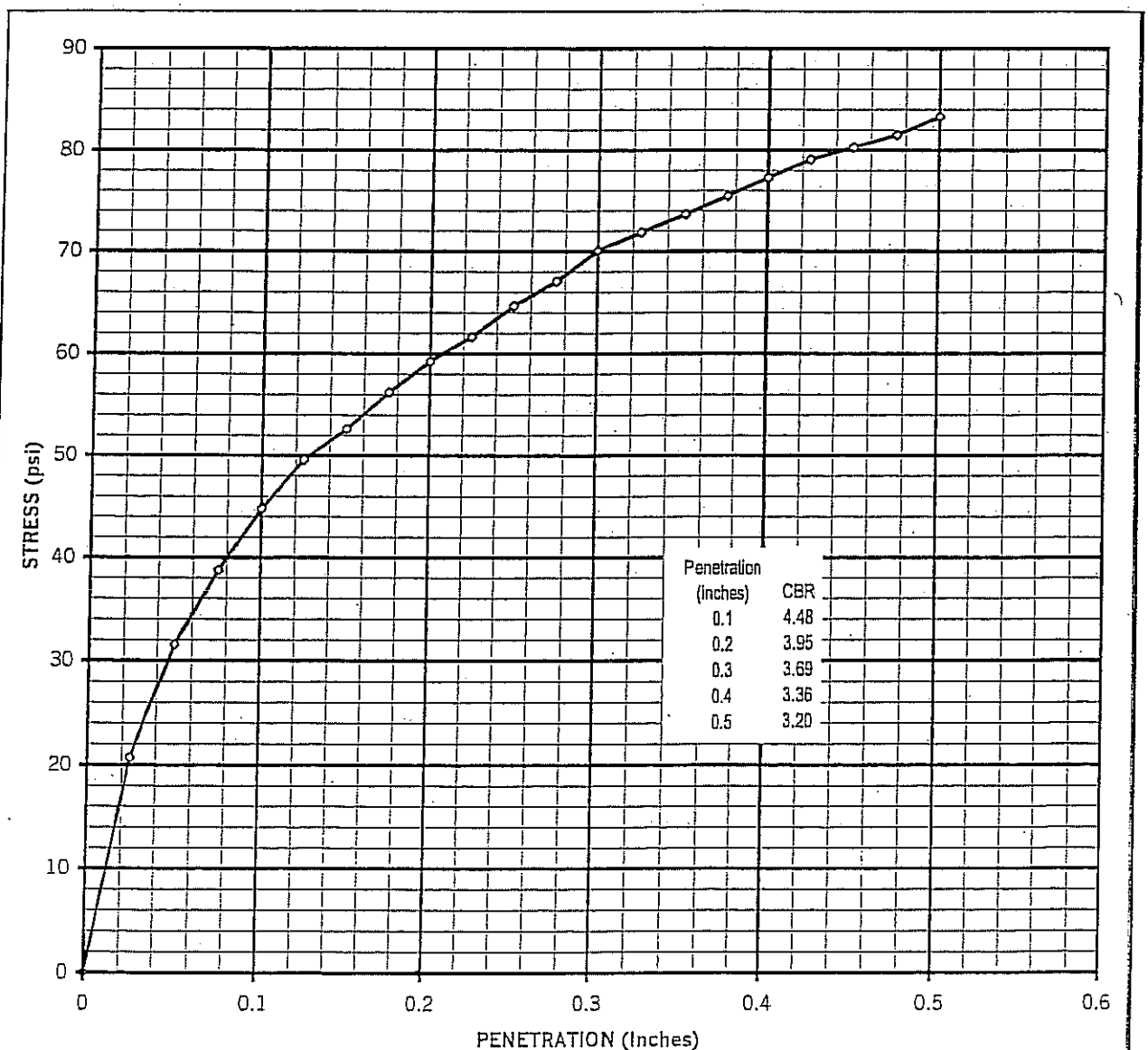
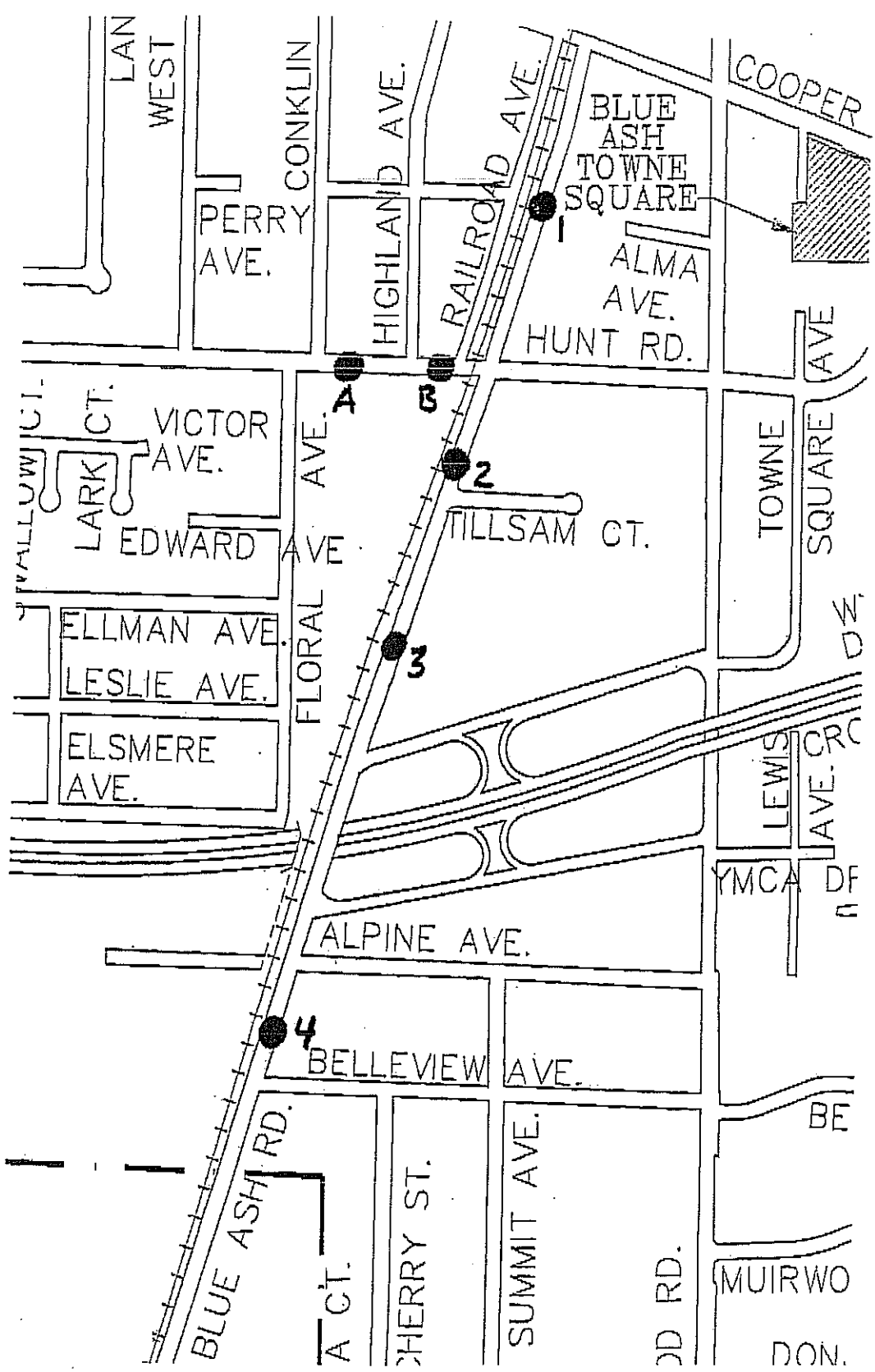
LABORATORY CBR TEST RESULT

Client :	CDS Associates, Inc.

Date :	01/12/04
Project No. :	031400N
Lab No :	040001N
Project :	Pavement Evaluation
	Blue Ash Road
	Blue Ash, Ohio

Sample Obtained From :	20' West of Core No. 2		Depth : 0.5' - 5.0'
Sample Description :	Mottled brown, trace gray CLAY, little fine to coarse sand, trace fine gravel		
USCS Classification :	CH	AASHTO Classification:	A-7-6
LL = 62 PL = 23	PI = 39	In Situ Moisture Content :	28.6%
Maximum Dry Density :	104.0 P.C.F.	Optimum Moisture Content :	16.9 %
Test Type :	Standard Proctor, ASTM D698		
Percent compaction during CBR test = 97.3% at a dry density of 101.2 P.C.F. and 20.6% moisture			
Moisture content of top inch =	22.2 %		





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PAVEMENT CORE PLAN

For: CDS ASSOCIATES, INC.

Project: PAVEMENT EVALUATION

BLUE ASH ROAD & HUNT ROAD

Location: BLUE ASH, OHIO

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LOG OF PAVEMENT CORE AND TEST BORING

CLIENT: CDS Associates, Inc. BORING # 1

PROJECT: Pavement Evaluation, Blue Ash Road, Blue Ash, Ohio JOB # 031400NEJ

LOCATION OF BORING: Southbound lane Blue Ash Road approximately 300 feet north of Hunt Road

SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (In.)	DEPTH SCALE (ft.)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (In.)
SURFACE	0.0						
ASPHALTIC CONCRETE (Good condition, well compacted)	2.5		I		1A	PC	2.5
					1B	PC	10.0
PORTLAND CEMENT CONCRETE (10", Top 6" heavily fractured with ¼" diameter W.W.F.)	12.5	1	U		2	PT	5"/24"
Mottled dark brown moist stiff FILL, sandy silty clay, trace fine gravel and cinders with roots.	18.5						
Bottom of test boring at 18.5 inches.		2 3 4 5 6 7 8 9 10 11					

Datum _____ Hammer Wt. _____ Hole Diameter 5 in. Foreman JP/DF

Surf. Elev. _____ Hammer Drop _____ Rock Core Dia. _____ Engineer KDW

Date Started 1-5-04 Pipe Size _____ Boring Method _____ Date Completed 1-5-04

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT

SAMPLE TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE

GROUND WATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER _____ hrs. _____ ft.

BORING METHOD
HSA– HOLLOW STEM AUGERS
CFA– CONTINUOUS FLIGHT AUGERS
DC – DRIVING CASING

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LOG OF PAVEMENT CORE AND TEST BORING

CLIENT: CDS Associates, Inc. BORING # 2

PROJECT: Pavement Evaluation, Blue Ash Road, Blue Ash, Ohio JOB # 031400NEJ

LOCATION OF BORING: Northbound lane Blue Ash Road in front of 9392 Blue Ash Road

SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (in.)	DEPTH SCALE (ft.)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (in.)
SURFACE	0.0						
ASPHALTIC CONCRETE (Good condition, well compacted)	4.5		I		1A	PC	4.25
					1B	PC	7.25
PORTLAND CEMENT CONCRETE (7.25", heavily fractured with ¼" diameter W.W.F.)	11.5	1					
			U		2	PT	16"/24"
Brown and gray moist stiff to very stiff SILTY CLAY.	27.5	2					
Bottom of test boring at 27.5 inches.		3 4 5 6 7 8 9 10 11					

Datum _____ Hammer Wt. _____ Hole Diameter 5 in. Foreman JP/DF

Surf. Elev. _____ Hammer Drop _____ Rock Core Dia. _____ Engineer KDW

Date Started 1-5-04 Pipe Size _____ Boring Method _____ Date Completed 1-5-04

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED

SAMPLE TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER

GROUND WATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER hrs. ft.

BORING METHOD
HSA– HOLLOW STEM AUGERS
CFA– CONTINUOUS FLIGHT AUGERS
DC – DRIVING CASING

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LOG OF PAVEMENT CORE AND TEST BORING

CLIENT: CDS Associates, Inc. BORING # 3

PROJECT: Pavement Evaluation, Blue Ash Road, Blue Ash, Ohio JOB # 031400NEJ

LOCATION OF BORING: Northbound lane Blue Ash Road in front of 9268 Blue Ash Road

SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (In.)	DEPTH SCALE (ft.)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (In.)
SURFACE	0.0						
ASPHALTIC CONCRETE (Good condition, well compacted)	4.0		I		1A	PC	4.0
					1B	PC	7.5
PORTLAND CEMENT CONCRETE (9.5", Good condition with ¼" diameter W.W.F.)	13.5	1					
			U		2	PT	14"/24"
Grayish brown moist stiff FILL, silty clay, trace limestone fragments.	27.5	2					
Bottom of test boring at 27.5 inches.		3 4 5 6 7 8 9 10 11					

Datum _____ Hammer Wt. _____ Hole Diameter 5 in. Foreman JP/DF

Surf. Elev. _____ Hammer Drop _____ Rock Core Dia. _____ Engineer KDW

Date Started 1-5-04 Pipe Size _____ Boring Method _____ Date Completed 1-5-04

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED

SAMPLE TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER

GROUND WATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER _____ hrs. _____ ft.

BORING METHOD
HSA– HOLLOW STEM AUGERS
CFA– CONTINUOUS FLIGHT AUGERS
DC – DRIVING CASING

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LOG OF PAVEMENT CORE AND TEST BORING

CLIENT: CDS Associates, Inc. BORING # 4

PROJECT: Pavement Evaluation, Blue Ash Road, Blue Ash, Ohio JOB # 031400NEJ

LOCATION OF BORING: Center lane Blue Ash Road in front of 9012 Blue Ash Road

SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (In.)	DEPTH SCALE (ft.)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (In.)
SURFACE	0.0						
ASPHALTIC CONCRETE (Good condition, well compacted)	5.0		I		1A 1B	PC PC	5.0 9.5
PORTLAND CEMENT CONCRETE (9.5", Very heavily fractured)	14.5	1	U		2	PT	14"/24"
Brown and gray moist stiff to very stiff SILTY CLAY.	28.5	2					
Bottom of test boring at 27.5 inches.		3 4 5 6 7 8 9 10 11					

Datum _____ Hammer Wt. _____ Hole Diameter 5 in. Foreman JP/DF

Surf. Elev. _____ Hammer Drop _____ Rock Core Dia. _____ Engineer KDW

Date Started 1-5-04 Pipe Size _____ Boring Method _____ Date Completed 1-5-04

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED

SAMPLE TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER

GROUND WATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER _____ hrs. _____ ft.

BORING METHOD
HSA– HOLLOW STEM AUGERS
CFA– CONTINUOUS FLIGHT AUGERS
DC – DRIVING CASING

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SOIL CLASSIFICATION SHEET

NON COHESIVE SOILS
(Silt, Sand, Gravel and Combinations)

Density

Very Loose	- 5 blows/ft. or less
Loose	- 6 to 10 blows/ft.
Medium Dense	- 11 to 30 blows/ft.
Dense	- 31 to 50 blows/ft.
Very Dense	- 51 blows/ft. or more

Relative Properties

Descriptive Term	Percent
Trace	1 – 10
Little	11 – 20
Some	21 – 35
And	36 – 50

Particle Size Identification

Boulders	- 8 inch diameter or more	
Cobbles	- 3 to 8 inch diameter	
Gravel	- Coarse	- 3/4 to 3 inches
	- Fine	- 3/16 to 3/4 inches
Sand	- Coarse	- 2mm to 5mm (dia. of pencil lead)
	- Medium	- 0.45mm to 2mm (dia. of broom straw)
	- Fine	- 0.075mm to 0.45mm (dia. of human hair)
Silt		- 0.005mm to 0.075mm (Cannot see particles)

COHESIVE SOILS
(Clay, Silt and Combinations)

Consistency	Field Identification	Unconfined Compressive Strength (tons/sq. ft.)
Very Soft	Easily penetrated several inches by fist	Less than 0.25
Soft	Easily penetrated several inches by thumb	0.25 – 0.5
Medium Stiff	Can be penetrated several inches by thumb with moderate effort	0.5 – 1.0
Stiff	Readily indented by thumb but penetrated only with great effort	1.0 – 2.0
Very Stiff	Readily indented by thumbnail	2.0 – 4.0
Hard	Indented with difficulty by thumbnail	Over 4.0

Classification on logs are made by visual inspection.

Standard Penetration Test – Driving a 2.0" O.D., 1 3/8" I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30 inches. It is customary to drive the spoon 6 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6 inches of penetration on the drill log (Example – 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e. 8+9=17 blows/ft.). Refusal is defined as greater than 50 blows for 6 inches or less penetration.

Strata Changes – In the column "Soil Descriptions" on the drill log, the horizontal lines represent strata changes. A solid line (————) represents an actually observed change; a dashed line (— — — —) represents an estimated change.

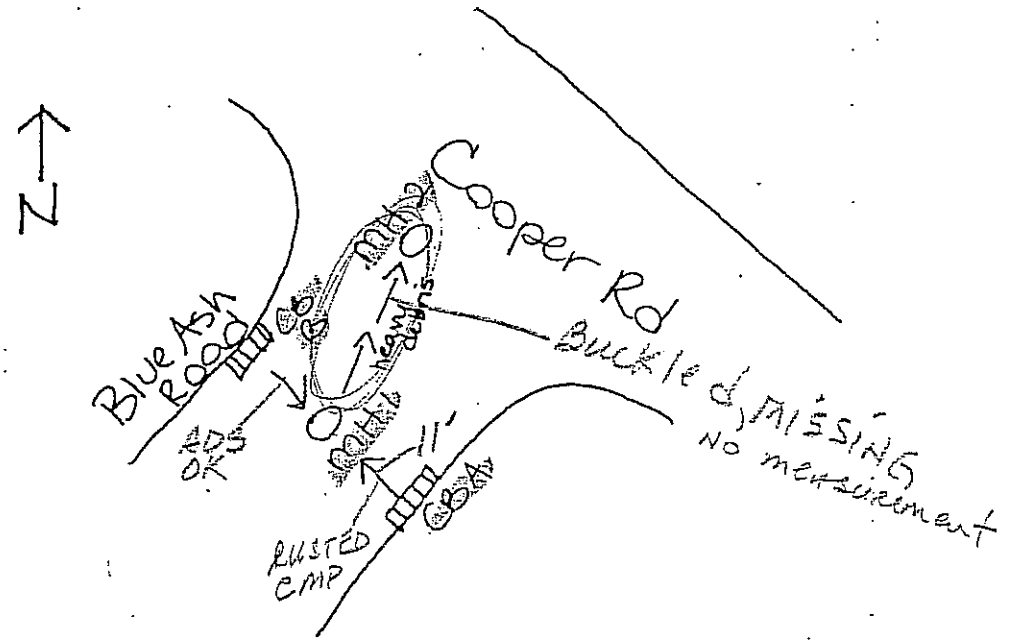
Groundwater observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

SWS TV INVESTIGATION

Job #: Page 1 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:
Area: Blue Ash	Sub-Area:	Video Counter: 00:00 - 01:14
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather: 35 F
Upstream MH Address:	near I/O Cooper Rd. & Blue Ash Rd.	Type of Pipe: Corrugated Steel
Downstream MH Address:	I/O Cooper Rd. & Blue Ash Rd.	Pipe Size (inch): 12.0
Line Location: street		Pipe Length (ft.): Unknown
Surface Cover: asphalt		TVd Distance (ft.): 4.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.): 8' 0"
Section Ground Distance:	Unknown	DSMH (ft):
Condition Being Investigated:	Pipe Condition	

Footage	Remarks	
0.0	Manhole	1 D.S. to MH 2
2.0	Pipe Missing	bottom, right side, difficult to see due to debris
2.0 - 4.0	Debris	light
4.0		Camera could not continue due to light debris, backed out.
		Note: Section requires cleaning prior to reinspection. SWS inspected from
		MH 1 D.S. to MH 2 from 03:52 to 07:08 minutes on the same video tape as
		this section. Unable to get all the way through due to debris. See report 4
		of 25.



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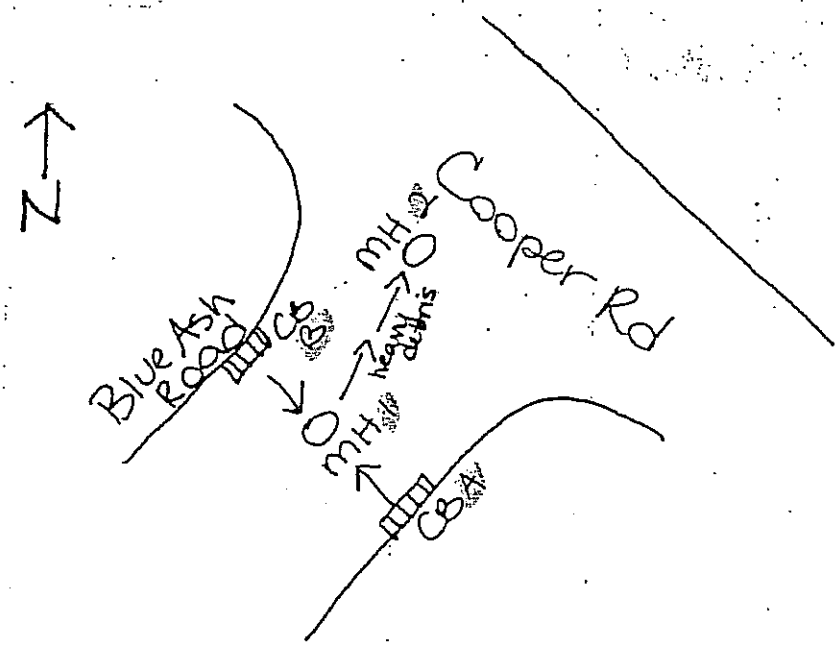
10860 INDECO DRIVE
CINCINNATI, OH 45241
(t) 513-793-7417
(f) 513-793-8751
(email) sws@pipeline.com

SWS TV INVESTIGATION

Job #:

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:
Area: Blue Ash	Sub-Area:	Video Counter: 01:14 - 02:30
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather: 35 F
Upstream MH Address:	near I/O Cooper Rd. & Blue Ash Rd.	Type of Pipe: Corrugated Steel
Downstream MH Address:	near I/O Cooper Rd. & Blue Ash Rd.	Pipe Size (Inch): 12.0
Line Location: street		Pipe Length (ft.): Unknown
Surface Cover: asphalt		TVd Distance (ft.): 12.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.): 5' 0"
Section Ground Distance: Unknown		DSMH (ft.): 8' 0"
Condition Being Investigated: Pipe Condition		

Footage	Remarks	
0.0	Manhole	1 U.S. to CB A
2.0 - 11.0	Deterioration	evidence of rusting through this section
12.0	Catch basin	middle of CB A. End of section.



MAP NOT TO SCALE

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(email) sws@pipeline.com

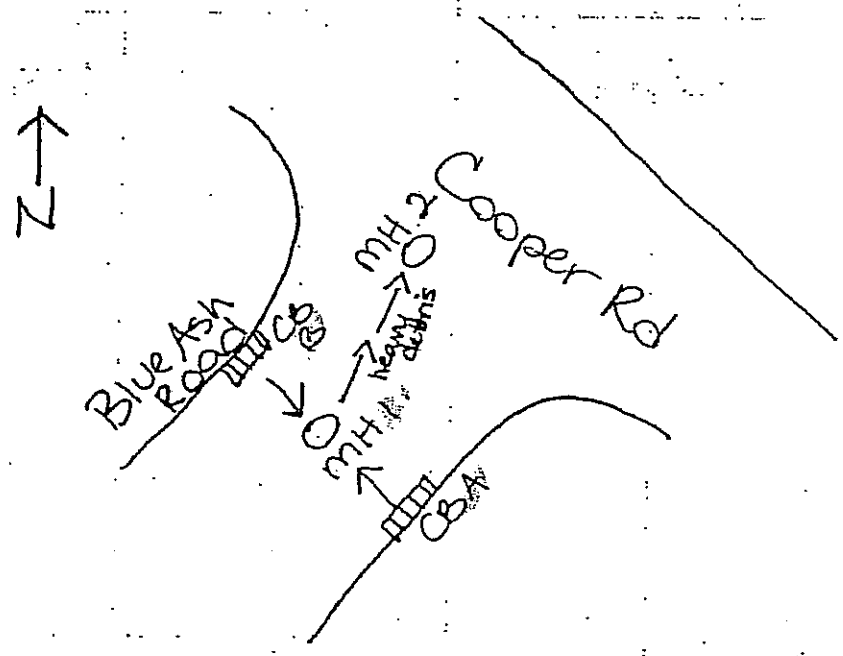
Filename: Blue_02.xls

SWS TV INVESTIGATION

Job #:

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	02:30 - 03:52
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	near I/O Cooper Rd. & Blue Ash Rd.	Type of Pipe:	Corrugated Plastic
Downstream MH Address:	near I/O Cooper Rd. & Blue Ash Rd.	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	18.2
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	6' 7"
Section Ground Distance:	Unknown	DSMH (ft):	8' 0"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Manhole	1 U.S. to CB B
16.2 - 18.2	Debris	light gravel
18.2	Catch basin	middle of CB B. End of section.



MAP NOT TO SCALE

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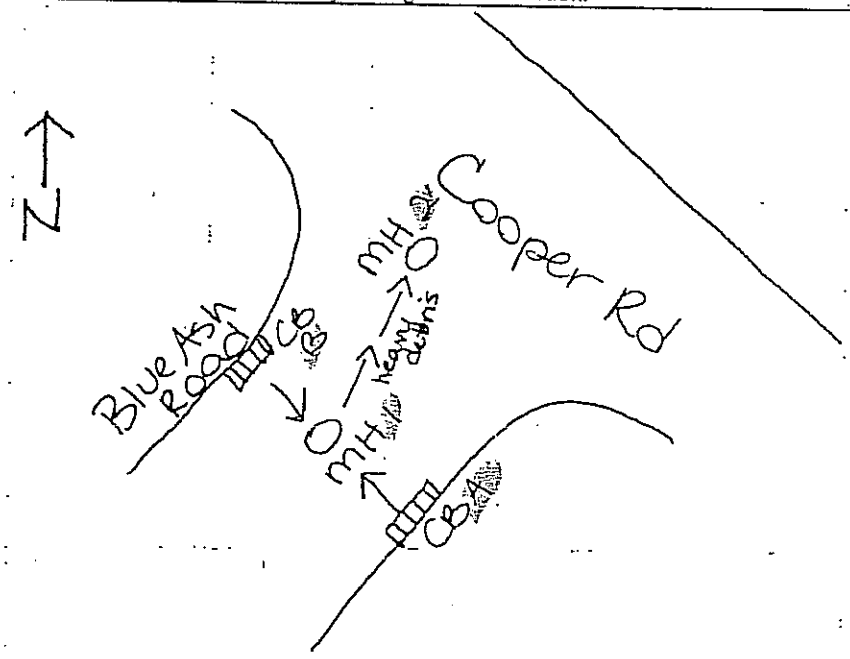
Filename: Blue_03.xls

SWS TV INVESTIGATION

Job #: Page 4 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 03:52 - 07:08
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	near I/O Cooper Rd. & Blue Ash Rd.		Type of Pipe: Corrugated Steel
Downstream MH Address:	I/O Cooper Rd. & Blue Ash Rd.		Pipe Size (inch): 12.0
Line Location: street			Pipe Length (ft.): Unknown
Surface Cover: asphalt			TVd Distance (ft.): 76.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 8' 0"
Section Ground Distance:	Unknown		DSMH (ft):
Condition Being Investigated:	Pipe Condition		

Footage		Remarks	
0.0		Manhole	1 D.S. to MH 2
2.0 -	4.0	Pipe Missing	bottom, right side
2.0 -	10.0	Debris	light gravel
2.0 -	15.0	Crack	light at 5:00
22.0 -	28.0	Crack	medium at 8:00, pipe appears to be buckled
32.0 -	54.0	Ponding	belly
57.0 -	65.0	Debris	light gravel
65.0 -	76.0	Debris	medium gravel
76.0 -	+	Debris	heavy
76.0			Camera could not continue due to heavy debris, backed out. Unable to see downstream manhole
			Note: SWS cleaned and attempted to reinspect this section. Section requires more cleaning. Evidence of pipe deterioration (e.g. rusting) was observed intermittently throughout this section.



MAP NOT TO SCALE

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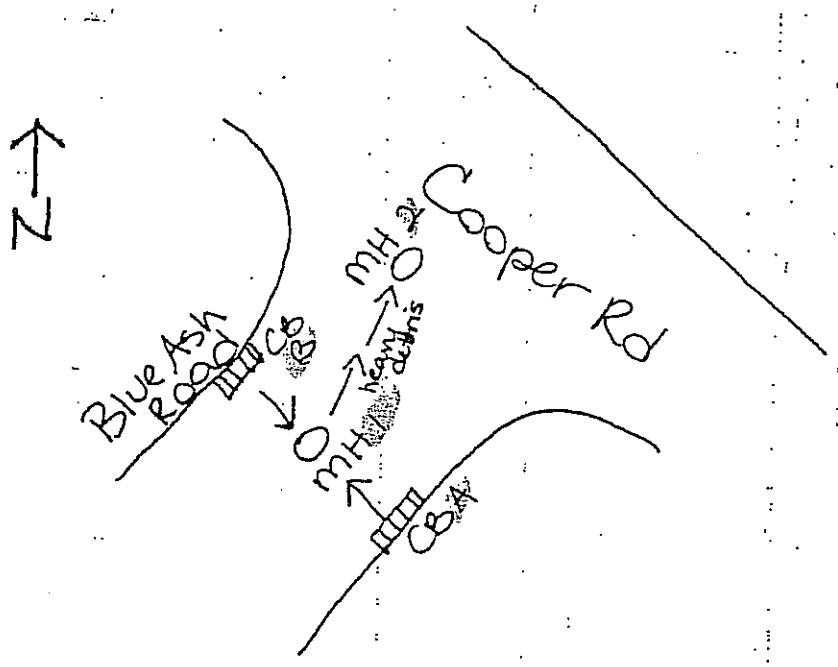
SWS TV INVESTIGATION

Job #: Page 5 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #	
Area: Blue Ash	Sub-Area:	Video Counter:	07:08 - 08:19
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Hunt Rd. & Blue Ash Rd.	Type of Pipe:	Corrugated Plastic
Downstream MH Address:	I/O Hunt Rd. & Blue Ash Rd.	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	18.0
Surface Cover: asphalt		TVd Distance (ft.):	28.4
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	2' 7"
Section Ground Distance:	Unknown	DSMH (ft):	5' 2"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks
0.0	Manhole 3 U.S. to CB C
27.4	Catch basin middle of CB C. End of section.



MAP NOT TO SCALE

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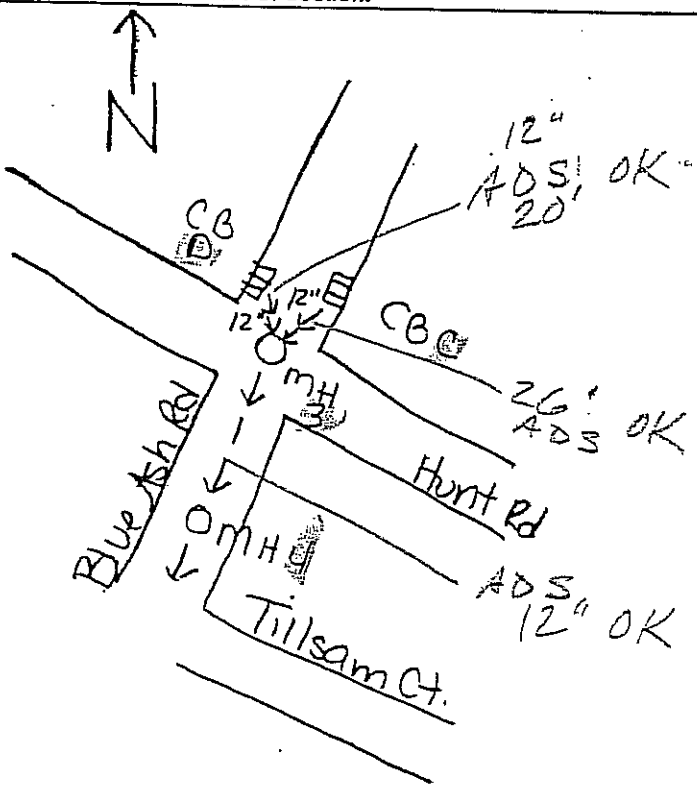
Filename: Blue_05.xls

SWS TV INVESTIGATION

Job #: Page 6 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	08:19 - 09:06
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Hunt Rd. & Blue Ash Rd.	Type of Pipe:	Corrugated Plastic
Downstream MH Address:	I/O Hunt Rd. & Blue Ash Rd.	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	18.0
Surface Cover: asphalt		TVd Distance (ft.):	20.2
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	2' 5"
Section Ground Distance:	Unknown	DSMH (ft):	5' 2"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Manhole	3 U.S. to CB D
20.2	Catch basin	middle of CB D. End of section.



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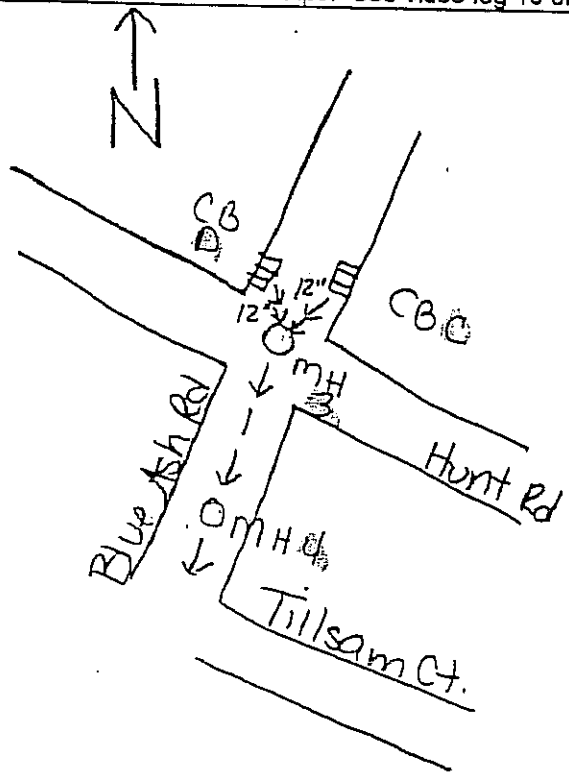
Filename: Blue_06.xls

SWS TV INVESTIGATION

Job #:

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	09:06 - 11:21
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Hunt Rd. & Blue Ash Rd.	Type of Pipe:	Corrugated Plastic
Downstream MH Address:	I/O Tillsam & Blue Ash Rd.	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	20.0
Surface Cover: asphalt		TVd Distance (ft.):	31.6
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	5' 2"
Section Ground Distance:	Unknown	DSMH (ft):	4' 9"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Manhole	3 D.S. to MH 4
26.0 - 31.6	Debris	light to medium sand and gravel
31.6		Camera could not continue due to medium debris, backed out.
		Note: Pipe appears to be in good structural shape downstream from 31.6 feet.
		SWS inspects this section going from MH 4 upstream to MH 3 from 13:05
		to 23:30 minutes on this video tape. See video log 10 of 25.



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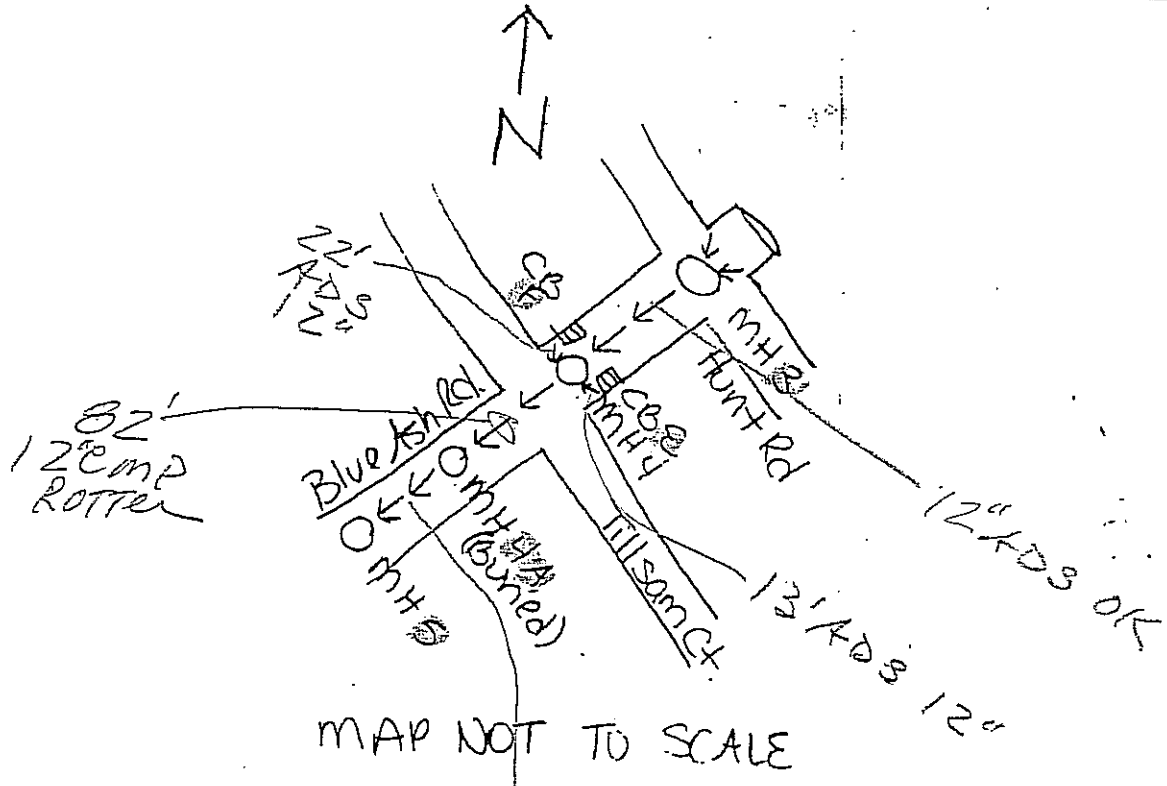
Filename: Blue_07.xls

SWS TV INVESTIGATION

Job #: Page 8 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	11:21 - 12:07
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Tillsam Ct. & Blue Ash Rd.	Type of Pipe:	Corrugated Plastic
Downstream MH Address:	I/O Tillsam Ct. & Blue Ash Rd.	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	14.5
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	3' 0"
Section Ground Distance:	Unknown	DSMH (ft):	4' 9"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks
0.0'	Manhole 4 U.S. to CB E
14.5	Catch basin middle of CB E. End of section.



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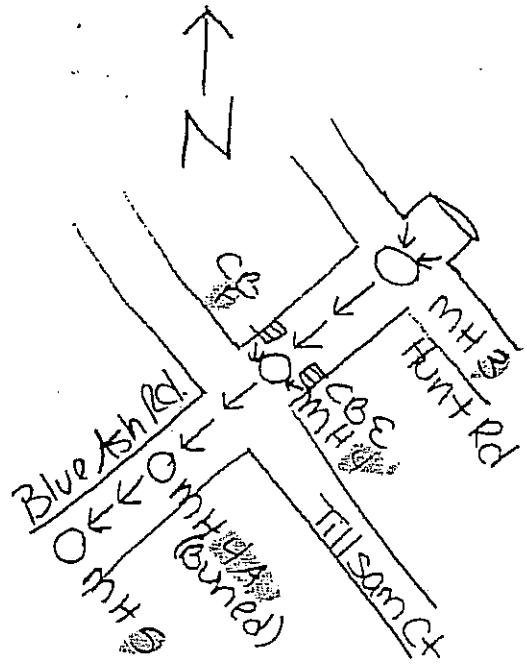
12" CMP
ROTTED
No mains.
Too much debris

SWS TV INVESTIGATION

Job #: Page 9 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 12:07 - 13:05
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	I/O Tillsam Ct. & Blue Ash Rd.		Type of Pipe: Corrugated Plastic
Downstream MH Address:	I/O Tillsam Ct. & Blue Ash Rd.		Pipe Size (inch): 12.0
Line Location: street			Pipe Length (ft.): 18.0
Surface Cover: asphalt			TVd Distance (ft.): 23.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 2' 9"
Section Ground Distance:	Unknown		DSMH (ft): 4' 9"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Manhole	4 U.S. to CB F
21.5 - 23.0	Debris	light
23.0	Catch basin	middle of CB F. End of section.



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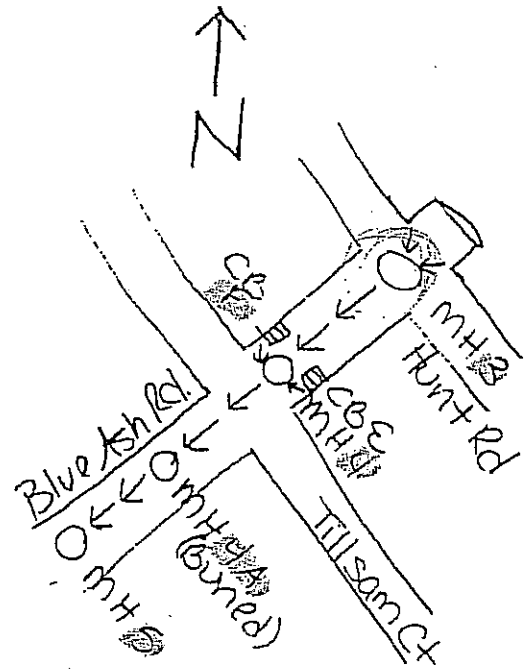
Filename: Blue_09.xls

SWS TV INVESTIGATION

Job #: Page 10 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 13:05 - 23:30
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	I/O Hunt Rd. & Blue Ash Rd.		Type of Pipe: Corrugated Plastic
Downstream MH Address:	I/O Tillsam Ct. & Blue Ash Rd.		Pipe Size (inch): 12.0
Line Location: street			Pipe Length (ft.): 20.0
Surface Cover: asphalt			TVd Distance (ft.): 371.4
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 5' 2"
Section Ground Distance:	Unknown		DSMH (ft): 4' 9"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Manhole	4 U.S. to MH 3
355.0 - 357.0	Debris	light gravel
366.0 - 371.4+	Debris	light to medium gravel
371.4		Overlapped footage from previous inspection, backed out.
		Note: SWS inspected 31.6 ft. of this section from MH 3 D.S. to MH 4 on this tape
		from 09:06 to 11:21 minutes. See videolog 7 of 25.



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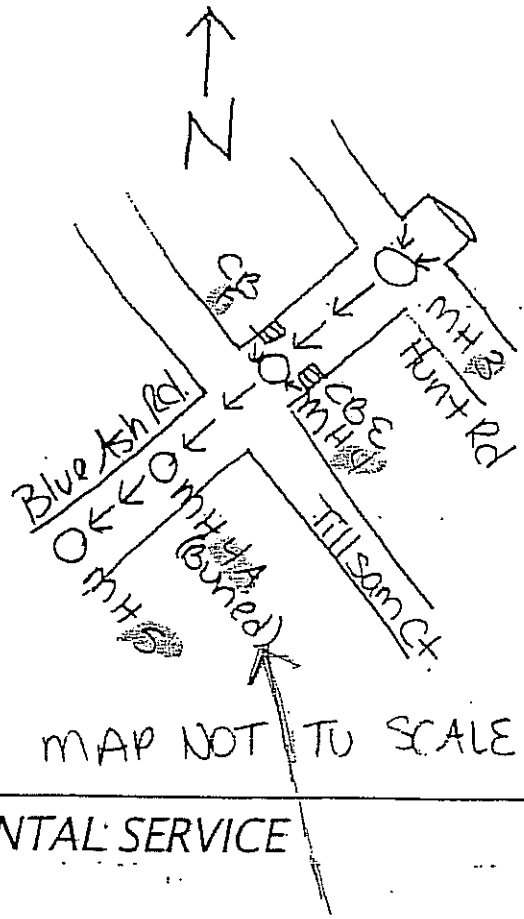
Filename: Blue_10.xls

SWS TV INVESTIGATION

Job #: Page 11 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	23:30 - 27:28
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	near I/O Tillsam Ct. & Blue Ash Rd.	Type of Pipe:	Corrugated Steel
Downstream MH Address:	near I/O Tillsam Ct. & Blue Ash Rd.	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	82.3
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	4' 9"
Section Ground Distance:	Unknown	DSMH (ft):	Buried
Condition Being Investigated:	Pipe Condition		

Footage		Remarks	
0.0		Manhole	4 D.S. to MH 4A
2.0 -	80.3	Deterioration	significant rusting, primarily near flow line
52.0 -	55.0	Infiltration	9:00 - 12:00, due to significant rusting
82.3		Manhole	middle of MH 4A (buried). End of section.



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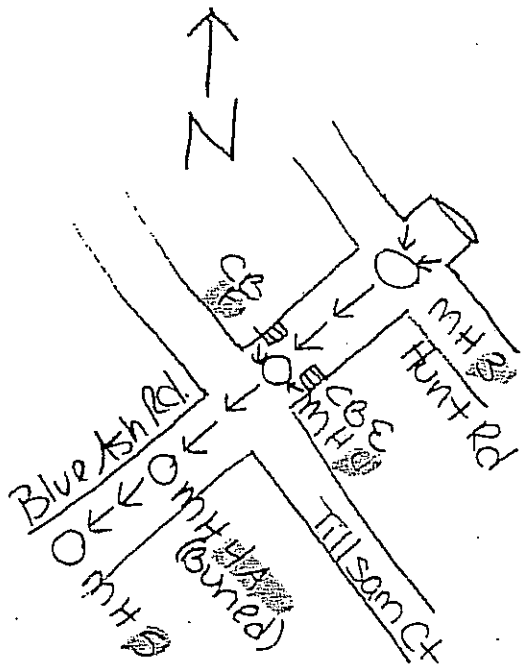
Filename: Blue_11.xls

SWS TV INVESTIGATION

Job #:

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	27:28 - 32:54
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Tillsam Ct. & Blue Ash Rd.	Type of Pipe:	Corrugated Steel
Downstream MH Address:	9308 Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	53.3
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	Buried
Section Ground Distance:	Unknown	DSMH (ft):	Unknown
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Manhole	4A D.S. to CB G (SEE PAGE 13)
2.0 - 5.0	Debris	
2.0 - 55.3+	Deterioration	intermittent rusting, primarily at flow line
50.8	Debris	2 large pieces of concrete or metal in line
53.3		Camera could not continue due to debris, backed out.
		Note: Section appears clean downstream from this point. A complete
		inspection for this section is available on videolog 13 of 25.



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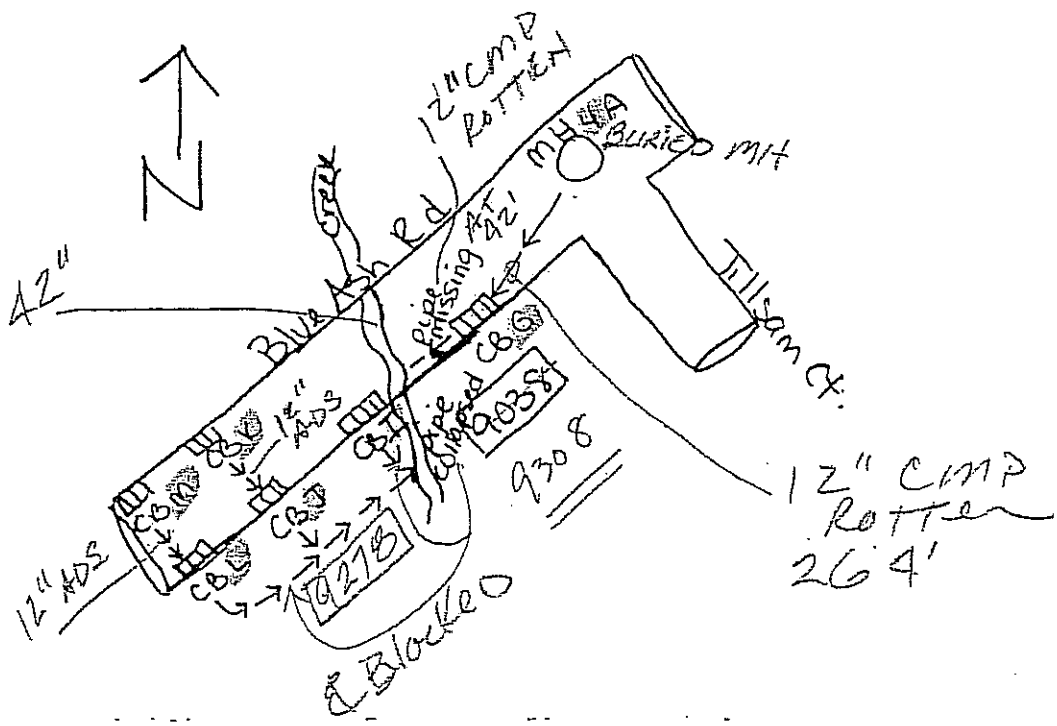
SWS TV INVESTIGATION

Job #: Page 13 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	32:54 - 39:38
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Tillsam Ct. & Blue Ash Rd.	Type of Pipe:	Corrugated Steel
Downstream MH Address:	9308 Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	210.6
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	Buried
Section Ground Distance:	Unknown	DSMH (ft):	Unknown
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	G U.S. to MH 4A
2.0 - 210.6+	Deterioration	intermittent rusting, primarily at flow line
210.6	Debris	2 large piece of concrete or metal
210.6		Overlapped footage with camera, backed out.
		Note: Section requires cleaning to remove 2 large pieces of debris. CB H does not
		exist (per hand drawn print provided by City of Blue Ash personnel). Section inspected
		going from MH 4A D.S. to CB G on previous video log (12 of 25).



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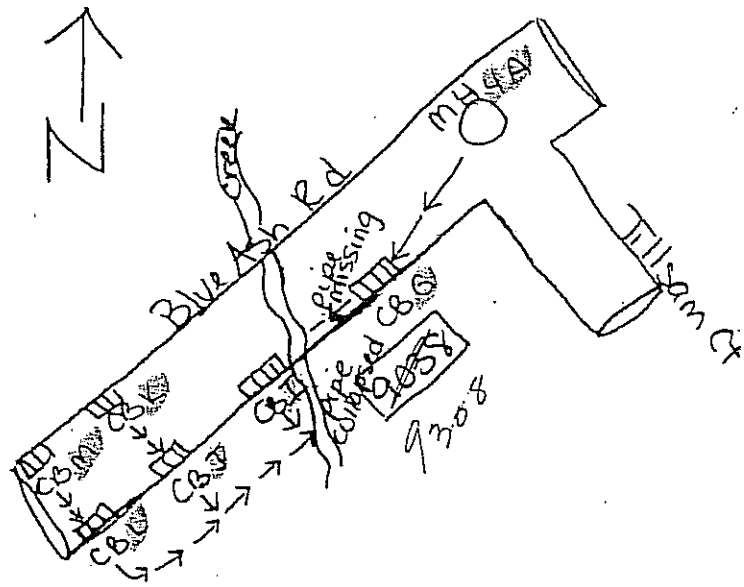
SWS TV INVESTIGATION

Job #:

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 39:38 - 42:1(
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	9308 Blue Ash Road		Type of Pipe: Corrugated Steel
Downstream MH Address:	9308 Blue Ash Road		Pipe Size (inch): 12.(
Line Location: street			Pipe Length (ft.): Unknowr
Surface Cover: asphalt			TVd Distance (ft.): 42.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): Unknowr
Section Ground Distance:	Unknown		DSMH (ft): NA
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	G D.S. to Trunk Line (blind connection) ???
2.0 - 42.0+	Deterioration	intermittent rusting, primarily at flow line
42.0	Pipe Missing	bottom, 4:00 to 8:00. Could not continue forward, backed camera out.
Hole in pipe		Note: SWS performed a visual inspection of the 6" lines from MH A U.S. to
		CB A-2 and MH A U.S. to CB A-1. Did not observe significant debris or
		structural deficiencies. Could not see where pipe connects into trunk line.
		Recommend that Blue Ash Personnel walk up trunk line and look up this
		sideline to identify section condition from trunk line.



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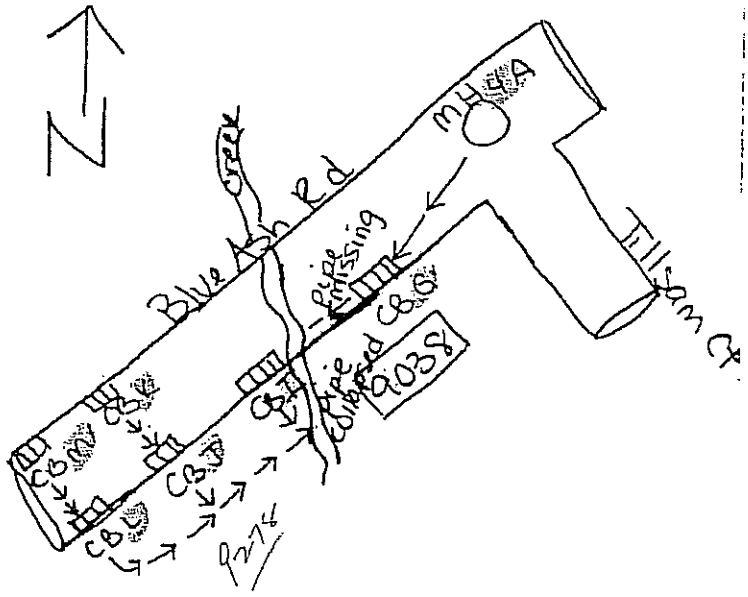
Filename: Blue_14.xls

SWS TV INVESTIGATION

Job #

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 42:10 - 44:3
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35
Upstream MH Address:	9308 Blue Ash Road		Type of Pipe: Corrugated Stee
Downstream MH Address:	9308 Blue Ash Road		Pipe Size (inch): 12.
Line Location: street			Pipe Length (ft.): Unknow
Surface Cover: asphalt			TVd Distance (ft.): 1.5
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 6' 0
Section Ground Distance:	Unknown		DSMH (ft): N/
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	I D.S. to T-connection (not shown on video tape)
1.5	T-Connection	at T-Connection. End of section..
		Note: Looked downstream of T-Connection towards creek (trunk line).
		Observed debris in line. Believe line heading toward trunk line is choked/blocked.
		Unable to put camera in line in order to inspect going downstream. Also looked
		upstream of T-Connection, pipe is egg-shaped. Unable to inspect going upstream.



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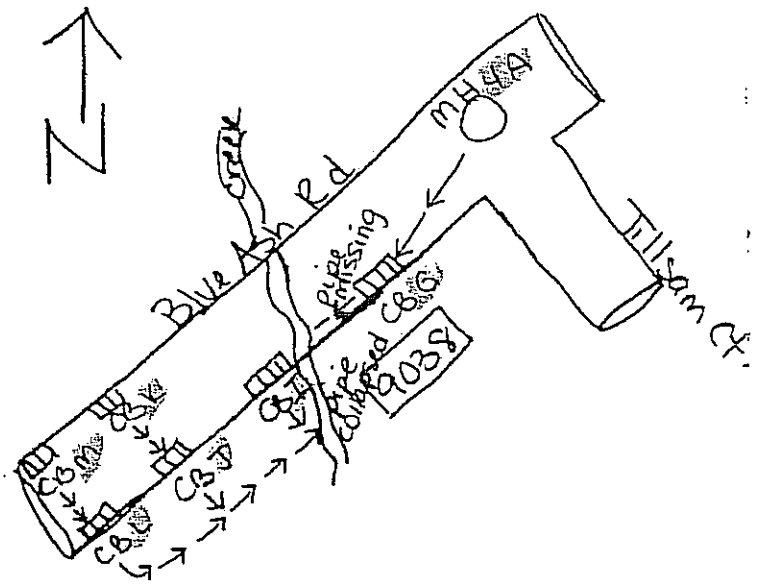
Filename: Blue_15.xls

SWS TV INVESTIGATION

Job #: Page 16 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 44:31 - 45:09
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	9728 Blue Ash Road		Type of Pipe: Corrugated Steel
Downstream MH Address:	9728 Blue Ash Road		Pipe Size (inch): 12.0
Line Location: street			Pipe Length (ft.): Unknown
Surface Cover: asphalt			TVd Distance (ft.): 0.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 5' 9"
Section Ground Distance:	Unknown		DSMH (ft): NA
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	J D.S. to T-Connection
		Note: Unable ot inspect from T-Connection downstream toward CB I (camera
		too large to fit through bend). No structural deficiencies or significant debris was
		observed.



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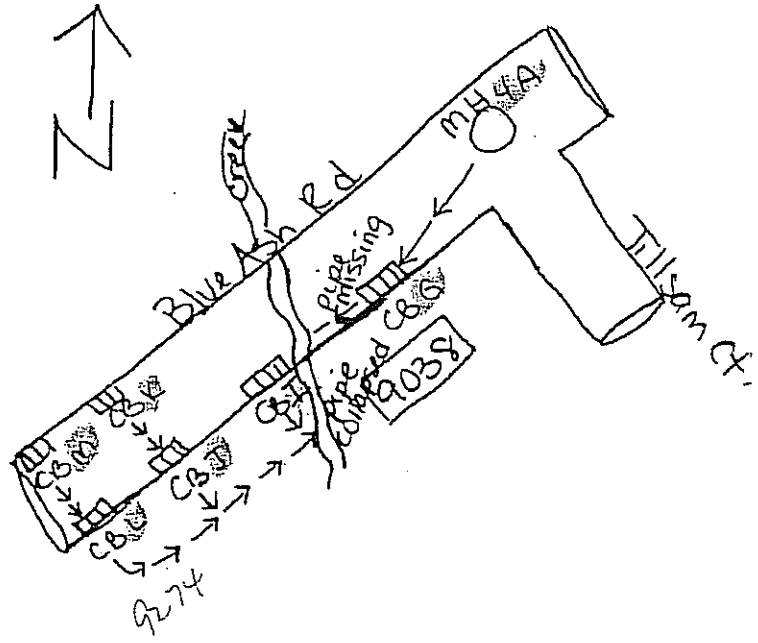
Filename: Blue_16.xls

SWS TV INVESTIGATION

Job #: Page 17 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	45:09 - 46:04
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	9728 Blue Ash Road	Type of Pipe:	Plastic
Downstream MH Address:	9728 Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft):	5' 4"
Section Ground Distance:	Unknown	DSMH (ft):	5' 9"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	J U.S. to CB K
		Note: Looked upstream with camera towards CB K. Able to observe daylight from
		upstream catch basin. No significant debris or structural deficiencies were observed.
		Instructed by Blue Ash personnel not to inspect entire section if able to see through it.



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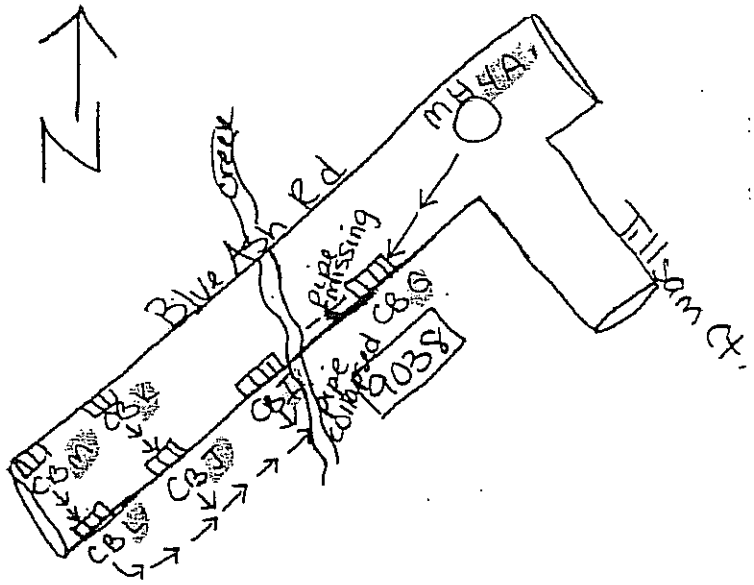
Filename: Blue_17.xls

SWS TV INVESTIGATION

Job #: Page 18 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 46:04 - 46:49
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	9728 Blue Ash Road		Type of Pipe: Plastic
Downstream MH Address:	9728 Blue Ash Road		Pipe Size (inch): 12.0
Line Location: street			Pipe Length (ft.): Unknown
Surface Cover: asphalt			TVd Distance (ft.): 0.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 5' 5"
Section Ground Distance:	Unknown		DSMH (ft): 4' 0"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	L U.S. to CB M
		Note: Looked upstream with camera towards CB M. Observed daylight from
		upstream catch basin. No significant debris or structural deficiencies were
		observed.



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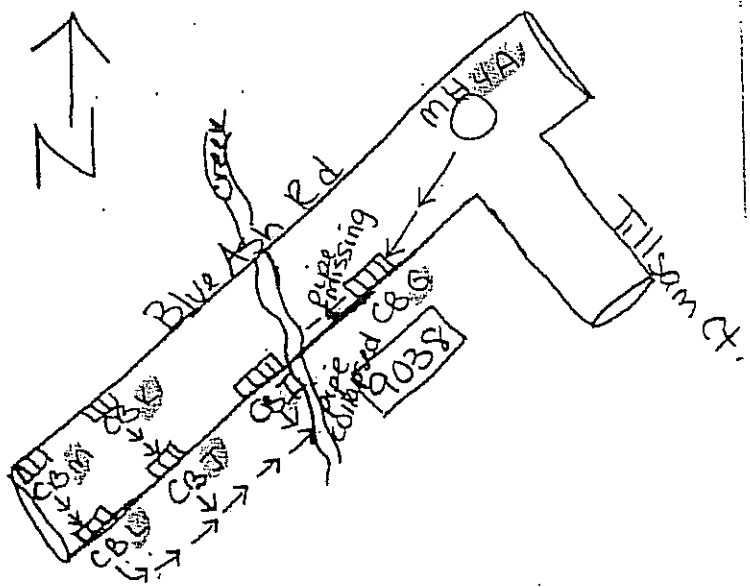
Filename: Blue_18.xls

SWS TV INVESTIGATION

Job #: Page 19 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 46:49 - 48:56
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	9728 Blue Ash Road		Type of Pipe: Plastic/Steel
Downstream MH Address:	9728 Blue Ash Road		Pipe Size (inch): 12.0
Line Location: street			Pipe Length (ft.): Unknown
Surface Cover: asphalt			TVd Distance (ft.): 0.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft): 5' 5"
Section Ground Distance:	Unknown		DSMH (ft): NA
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	L D.S. to 42" trunk line
4.0	Pipe Missing	right side, observed tree roots and debris
4.0		Camera could not continue due to pipe missing, backed out.
		Note: SWS inspected connection of 12" with 42" trunk line. Line is blocked
		with shapeloss.



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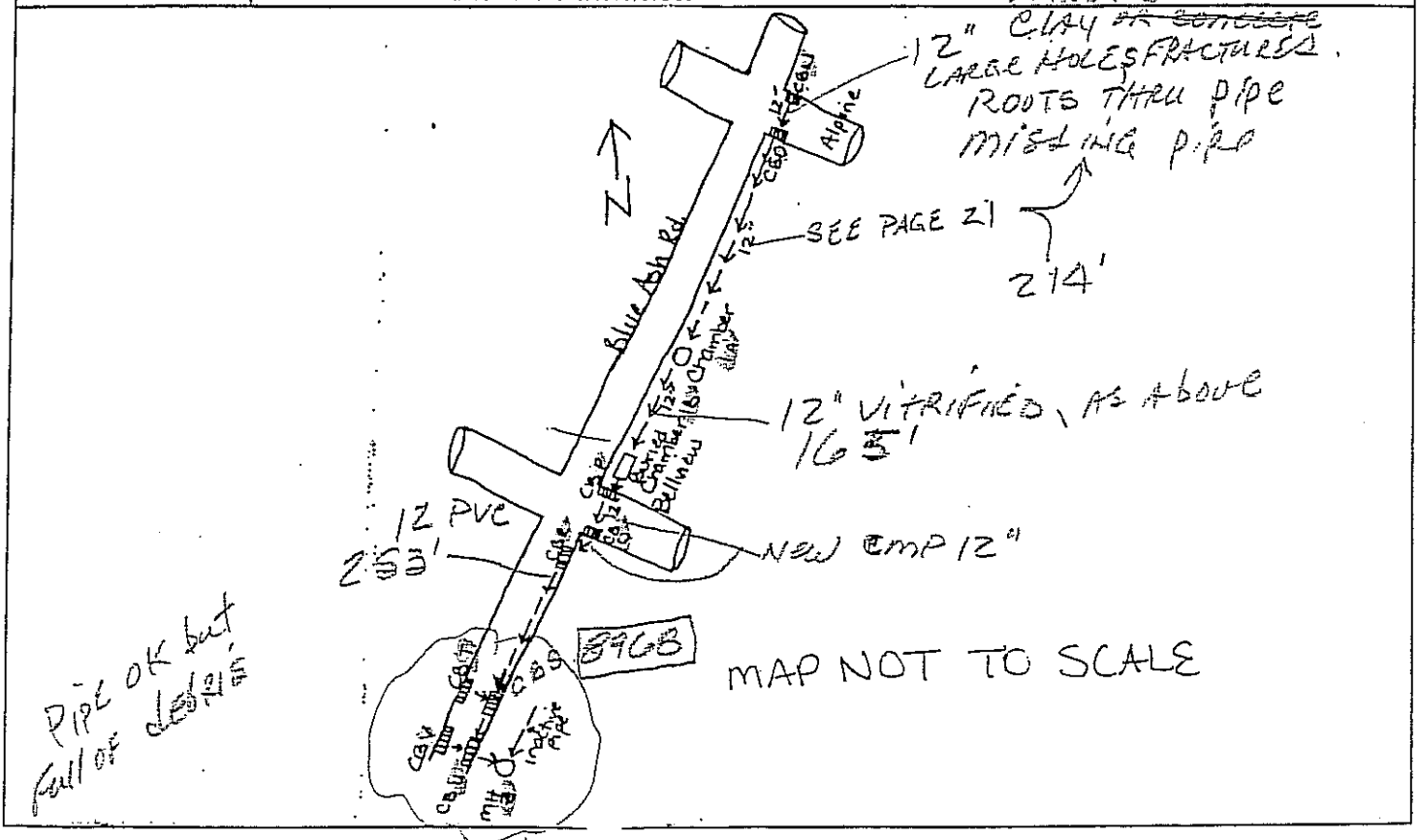
Filename: Blue_19.xls

SWS TV INVESTIGATION

Job #: Page 20 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	48:56 - 49:35
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Alpine & Blue Ash Road	Type of Pipe:	Conc.
Downstream MH Address:	I/O Alpine & Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	1' 5"
Section Ground Distance:	Unknown	DSMH (ft):	1' 5"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks
0.0	Catch basin O U.S. to CB N
	Note: Looking upstream with camera. Unable to put camer in line to inspect.
	Able to see upstream catch basin. Did not observe any significant debris or
	structural deficiencies.



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SWS TV INVESTIGATION

Job #: |

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 49:35 - 1:02:18
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	I/O Alpine & Blue Ash Road		Type of Pipe: Vit
Downstream MH Address:	9012 Blue Ash Road		Pipe Size (inch): 12.0
Line Location: easement			Pipe Length (ft.): 2.0
Surface Cover: soil			TVd Distance (ft.): 213.9
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 1' 5"
Section Ground Distance:	Unknown		DSMH (ft): 2' 0"
Condition Being Investigated:	Pipe Condition		

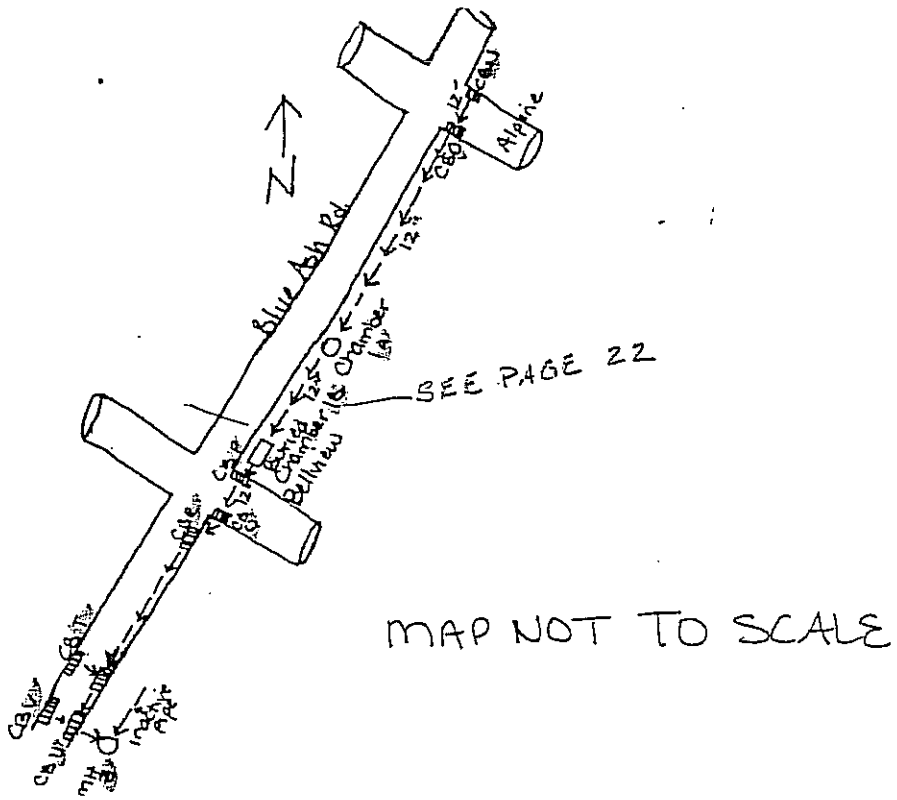
Footage	Remarks	
0.0	Catch basin	O D.S. to Chamber 1A
3.5 - 5.5	Pipe Missing	right side, 12:00 to 5:00, large hole
6.0	Crack	light at joint, radial
10.5	Crack	light at joint
30.5	Crack	light at joint
34.4	Crack	light at joint
42.0 - 48.7	Crack	light at 12:00
48.7	Crack	light at joint
52.7	Crack	light at joint
54.6 - 112.0	Roots	light at joints, various (roots generally are light)
62.9	Crack	light at joitn, radial, medium
67.7	Pipe Missing	chipped pipe at 9:00 w/roots
112.8	Crack	light at joint
119.0	Crack	light at joint
123.0	Crack	light at joint
128.2	Tap	9:00 first joint is offset, open, small piece of pipe missing
129.4	Crack	light at joint
133.0	Crack	light at joint
135.2	Crack	light at joint
139.2	Crack	light at joint, radial
162.0 - 167.0	Crack	light at 12:00
174.5	Tap	10:00, medium debris, possible pipe change 1' to 2' upstream
175.0 - 195.0	Roots	light at joint
185.5	Crack	light at joint
194.9	Tap	9:00 w/medium debris and light roots, open at invert (SANITARY?)
197.0	Crack	light, various
198.6	Pipe Missing	left side w/mud feeding in
205.3	Pipe Missing	9:00, possible broken tap, full of debris, mud feeding in
210.8	Tap	break-in 2", 10:00, vit w/medium cracks inside
213.9	Chamber	middle of Chamber 1A. End of section.
		Note: Chamber 1A is not buried. Can see daylight through lid on video.

SWS TV INVESTIGATION

Job #: | Page 21A of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	49:35 - 1:02:18
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Alpine & Blue Ash Road	Type of Pipe:	Vit
Downstream MH Address:	9012 Blue Ash Road	Pipe Size (inch):	12.0
Line Location: easement		Pipe Length (ft.):	2.0
Surface Cover: soil		TVd Distance (ft.):	213.9
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	1' 5"
Section Ground Distance:	Unknown	DSMH (ft):	2' 0"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks



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Filename: Blue_21.xls

SWS TV INVESTIGATION

Job #:

Date: 2/26/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 1:02:18 - 1:12:40
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 35 F
Upstream MH Address:	9012 Blue Ash Road		Type of Pipe: Vit
Downstream MH Address:	I/O Bellview & Blue Ash Road		Pipe Size (inch): 12.0
Line Location: easement			Pipe Length (ft.): 2.0
Surface Cover: soil			TVd Distance (ft.): 165.2
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 2' 0"
Section Ground Distance:	Unknown		DSMH (ft): Buried
Condition Being Investigated:	Pipe Condition		

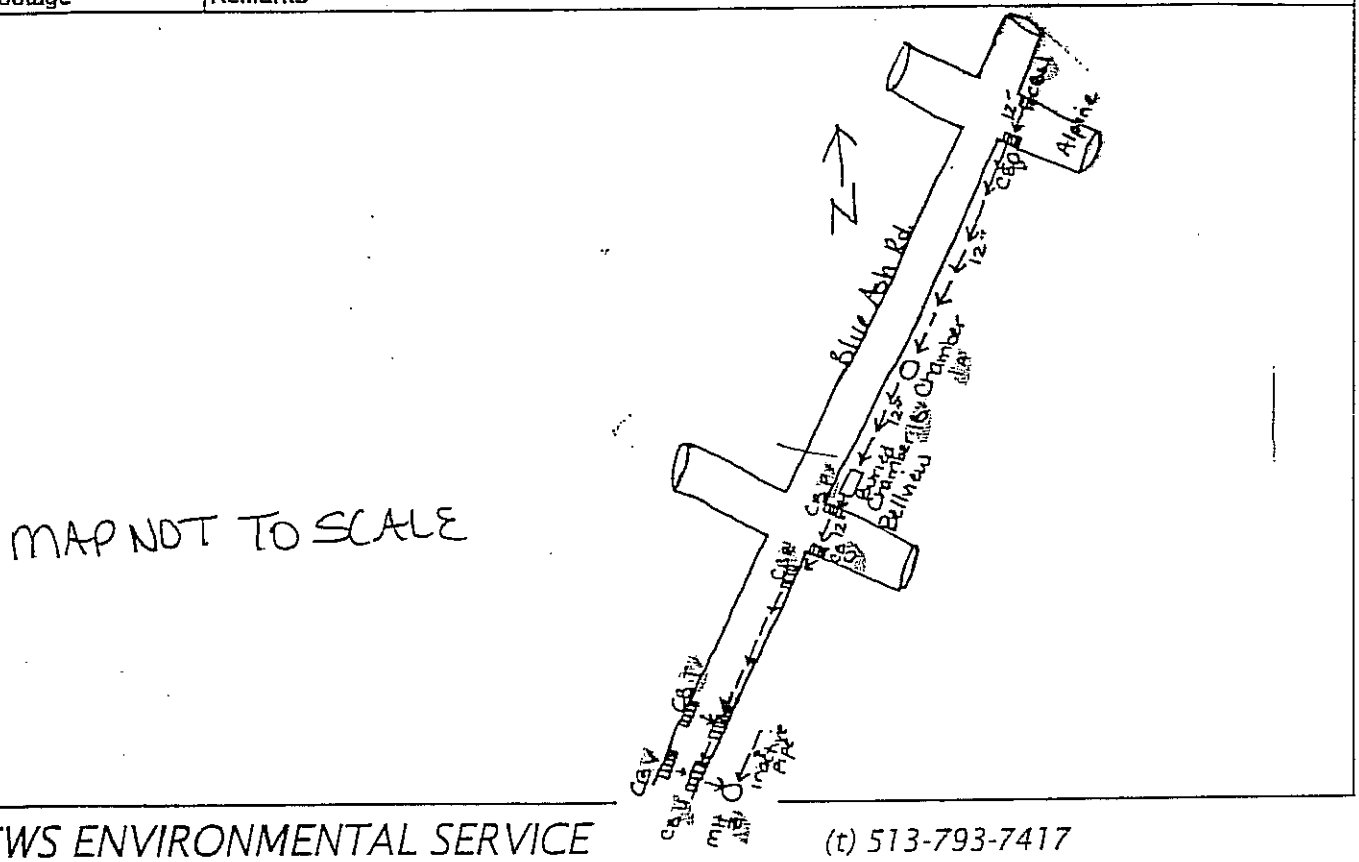
Footage	Remarks	
0.0	Chamber	1A D.S. to Chamber 1B
3.9	Crack	light at joint
6.0	Crack	light at joint
14.7	Tap	break-in 1", 10:00 w/broken pipe inside
16.3	Crack	light at joint
37.3	Tap	9:00 w/debris, first 2 joints offset
38.3	Crack	heavy at joint
40.6	Off-set joint	1" - 2"
42.5	Off-set joint	1" - 2", appears to be open too
44.0 - 72.0	Crack	light, various 3:00, 6:00, 9:00, 12:00
65.4	Crack	9:00, collapsed, open at invert w/mud feeding in, first joint dropped
71.6	Hole	12:00, pick hole
78.4	Crack	light at joint
80.6	Crack	light at joint
86.0	Crack	light at joint
90.3	Crack	light at joint
96.2	Crack	light at joint
110.4	Crack	light at joint
120.3	Crack	light at joint
128.6	Crack	light at joint
165.2	Chamber	at Chamber 1B (buried). End of section.
		Note: Looked upstream towards CB P, sectoin does not appear to have
		structural deficiencies. See video tape prior to 1:12:40 minutes. It is a 12"
		line, corrugated steel.

SWS TV INVESTIGATION

Job #: Page 22 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	1:02:18 - 1:12:40
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	9012 Blue Ash Road	Type of Pipe:	Vit
Downstream MH Address:	I/O Bellview & Blue Ash Road	Pipe Size (inch):	12.0
Line Location: easement		Pipe Length (ft.):	2.0
Surface Cover: soil		TVd Distance (ft.):	165.2
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	2' 0"
Section Ground Distance:	Unknown	DSMH (ft):	Buried
Condition Being Investigated:	Pipe Condition		

Footage	Remarks



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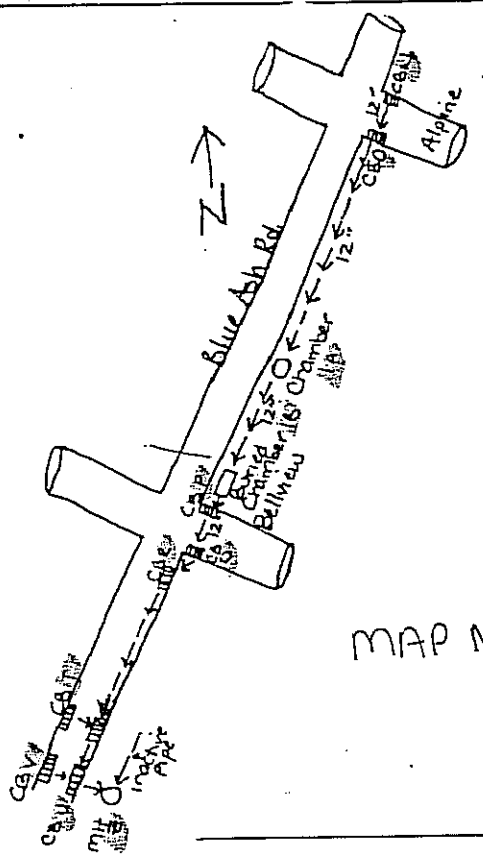
SWS TV INVESTIGATION

Job #:

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	1:12:40 - 1:13:10
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Bellview & Blue Ash Road	Type of Pipe:	Corrugated Steel
Downstream MH Address:	I/O Bellview & Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	2' 0"
Section Ground Distance:	Unknown	DSMH (ft):	3' 0"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	Q U.S. to CB P
1.0 - +	Debris	medium sand and gravel.
		Unable to continue due to debris, backed camera out.
		Note: Section needs to be cleaned. Able to see daylight from CB P.



MAP NOT TO SCALE

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Filename: Blue_23.xls

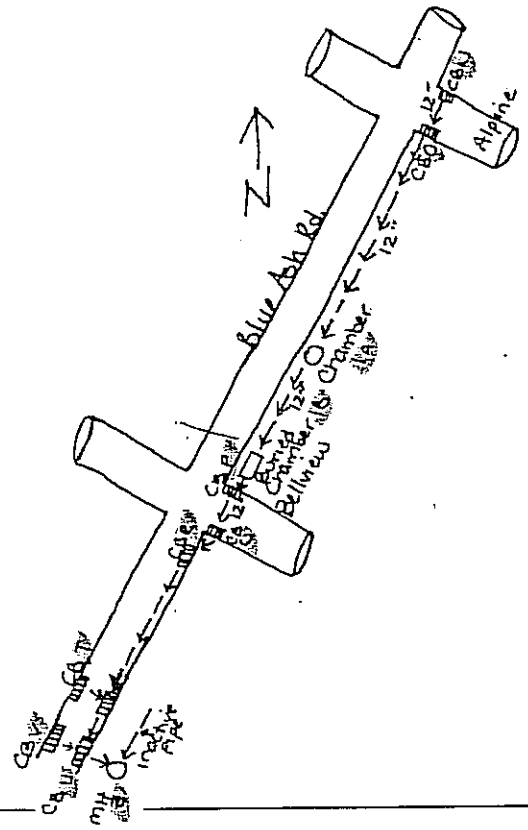
SWS TV INVESTIGATION

Job #: Page 24 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	1:13:10 - 1:13:32
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Bellview & Blue Ash Road	Type of Pipe:	PVC
Downstream MH Address:	I/O Bellview & Blue Ash Road	Pipe Size (inch):	12.0
Line Location: easement		Pipe Length (ft.):	Unknown
Surface Cover: soil		TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	3' 0"
Section Ground Distance:	Unknown	DSMH (ft):	2' 4"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	Q D.S. to CB R
		Note: Looked downstream from CB Q towards CB R. Light debris was observed.
		Did not observe any structural deficiencies.

MAP NOT TO SCALE



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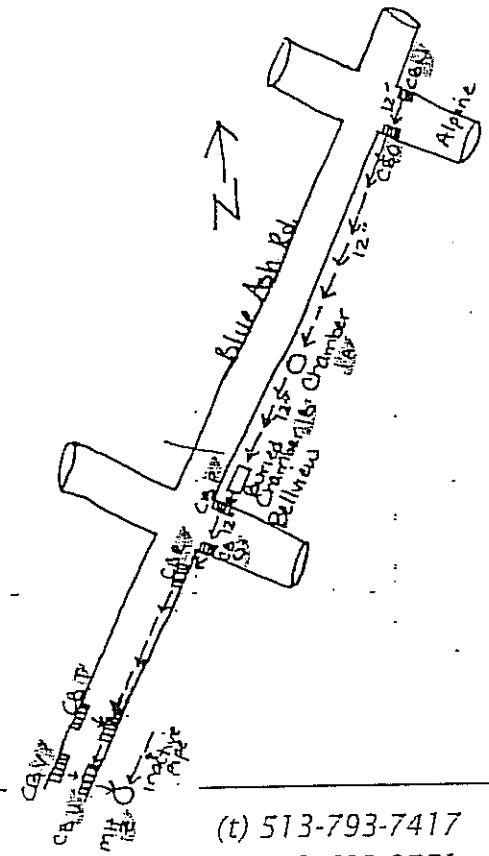
SWS TV INVESTIGATION

Job #: | Page 25 of 25

Date: 2/26/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	1:13:32 - 1:22:43
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	35 F
Upstream MH Address:	I/O Bellview & Blue Ash Road	Type of Pipe:	PVC
Downstream MH Address:	near I/O Bellview & Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	13.0
Surface Cover: asphalt		TVd Distance (ft.):	253.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	2' 4"
Section Ground Distance:	Unknown	DSMH (ft):	Unknown
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	R D.S. to CB S
2.0 - 20.0	Debris	light, sand and gravel
38.0 - 45.0	Debris	light, sand and gravel
69.5 - 73.0	Crack	light at 11:00 down to 8:00, proabably a saw cut
69.5	Crack	light, radial, left side
73.0	Crack	light, radial, left side
140.0 - 253.0+	Debris	light; leaves, mud and sludge
185.4 - 188.0	Crack	light at 11:00, probably a saw cut
186.4	Broken Pipe	small hole, 11:00 w/light debris falling in & light infiltration
190.0 - 217.0	Ponding	belly, due to debris in line
240.0 - 253.0+	Ponding	belly, due to debris in line
253.0	Catch basin	middle of CB S. End of section.

MAP NOT TO SCALE



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Filename: Blue 25.xls

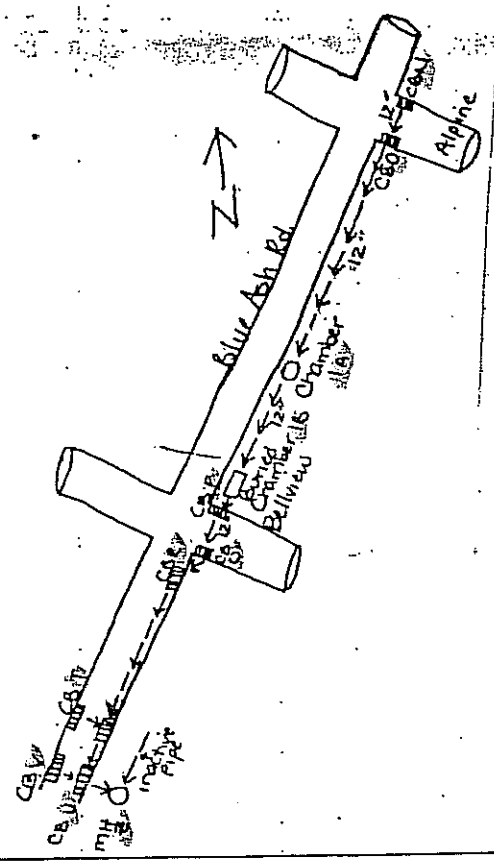
SWS TV INVESTIGATION

Job #: Page 1 of 7

Date: 2/27/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 00:00 - 00:52
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 40 F
Upstream MH Address:	8968 Blue Ash Road		Type of Pipe: PVC
Downstream MH Address:	8968 Blue Ash Road		Pipe Size (inch): (12.0)
Line Location:	street		Pipe Length (ft.): Unknown
Surface Cover:	asphalt		TVd Distance (ft.): 0.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 1' 8"
Section Ground Distance:	Unknown		DSMH (ft): 2' 7"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks
0.0	Catch basin S U.S. to CB T
	Note: Performed a visual inspection with the camera. Camera unable to fit in line.
	Able to see daylight from catch basin T. Pipe is clean and appears to have no
	deficiencies.

MAP NOT TO SCALE



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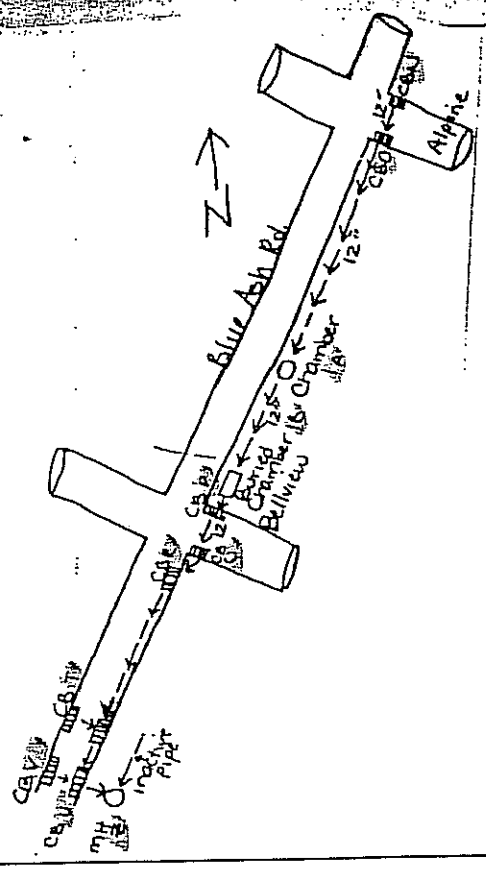
SWS TV INVESTIGATION

Job #: Page 2 of 7

Date: 2/27/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	00:52 - 01:27
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	40 F
Upstream MH Address:	8968 Blue Ash Road	Type of Pipe:	PVC
Downstream MH Address:	8968 Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	2' 7"
Section Ground Distance:	Unknown	DSMH (ft):	2' 2"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	S D.S. to CB U
0.0 - +	Debris	pipe is approximately 1/2 full with debris and water
		Note: Performed a visual inspection with the camera. Camera unable to fit
		in line. Able to see daylight from Catch Basin U. Did not observe any
		structural deficiencies.

MAP NOT TO SCALE



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Filename: Blue_27.xls

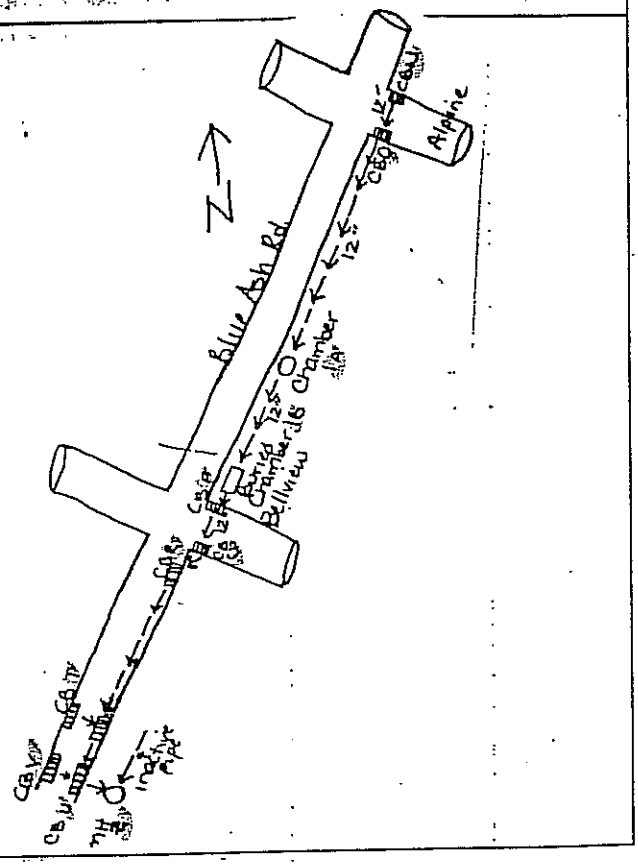
SWS TV INVESTIGATION

Job #:

Date: 2/27/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	01:27 - 02:06
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	40 F
Upstream MH Address:	8968 Blue Ash Road	Type of Pipe:	PVC
Downstream MH Address:	8968 Blue Ash Road	Pipe Size (inch):	12.0
Line Location:	street	Pipe Length (ft.):	Unknown
Surface Cover:	asphalt	TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	3' 0"
Section Ground Distance:	Unknown	DSMH (ft):	2' 2"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks	
0.0	Catch basin	U U.S. to CB V
0.0 - +	Ponding	appears to be a belly on downstream end.
		Note: Since camera would not fit in line, performed a visual inspection from
		Catch Basin U, pipe is open and clean. Did not observe any structural
		deficiencies within this section.

MAP NOT TO SCALE



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Filename: Blue_28.xls

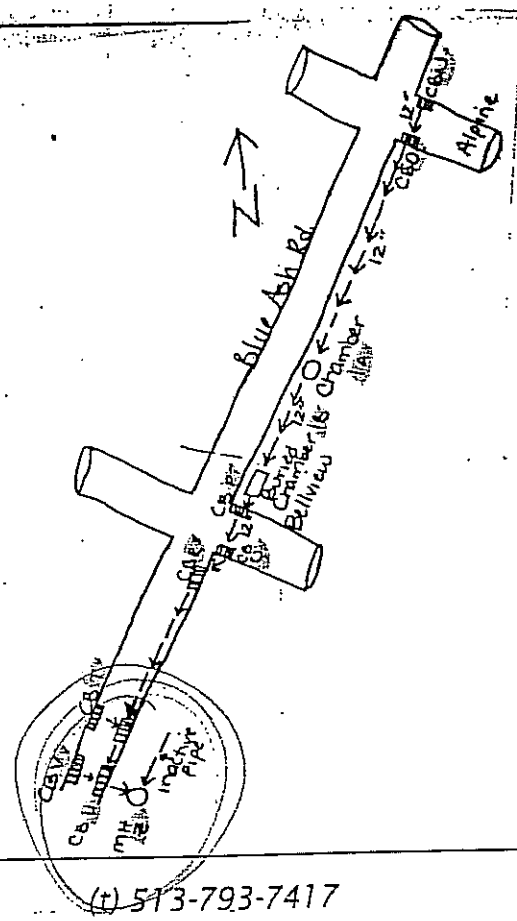
SWS TV INVESTIGATION

Job #:

Date: 2/27/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 02:06 - 02:28
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 40 F
Upstream MH Address:	8968 Blue Ash Road		Type of Pipe: PVC
Downstream MH Address:	8968 Blue Ash Road		Pipe Size (inch): 12.0
Line Location: street			Pipe Length (ft.): Unknown
Surface Cover: asphalt			TVd Distance (ft.): 0.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.): 2' 2"
Section Ground Distance:	Unknown		DSMH (ft):
Condition Being Investigated:	Pipe Condition		

Footage	Remarks
0.0	Catch basin U D.S. to MH Z
	Note: Performed a visual inspection with the camera looking toward MH Z.
	MH Z is approximately 2 feet away. Did not observe significant structural
	deficiencies.

MAP NOT TO SCALE



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Filename: Blue_29.xls

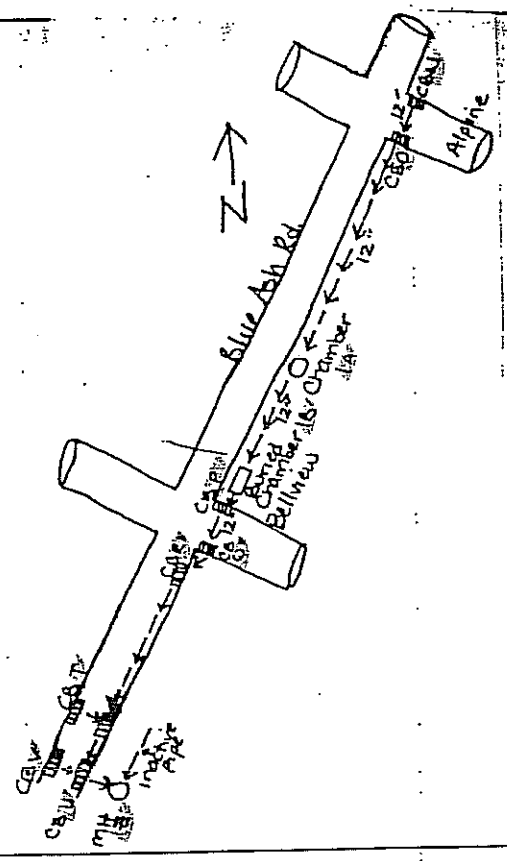
SWS TV INVESTIGATION

Job #:

Date: 2/27/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	02:28 - 02:43
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	40 F
Upstream MH Address:	8968 Blue Ash Road	Type of Pipe:	PVC
Downstream MH Address:	8968 Blue Ash Road	Pipe Size (inch):	12.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	2' 7"
Section Ground Distance:	Unknown	DSMH (ft):	2' 2"
Condition Being Investigated:	Pipe Condition		

Footage	Remarks
0.0	Catch basin U U.S. to CB S
	Note: Performed a visual inspection from CB S D.S. to CB U. Previously SWS
	inspected this section from 00:52 to 01:27 minutes. Pipe is full of water and
	debris.

MAP NOT TO SCALE



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Filename: Blue_30.xls

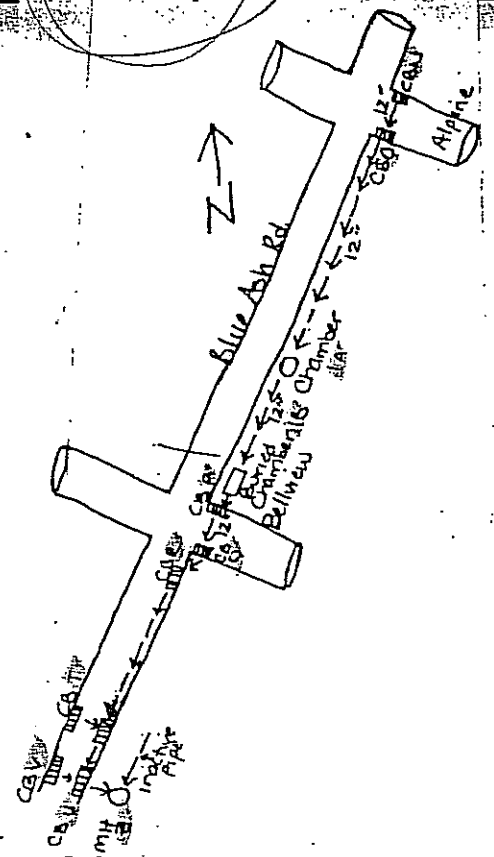
SWS TV INVESTIGATION

Job #: Page 6 of 7

Date: 2/27/01	Investigator: Tim Bilby (SWS)		Video Tape #:
Area: Blue Ash	Sub-Area:		Video Counter: 02:43 - 04:04
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road		Weather: 40 F
Upstream MH Address:	8968 Blue Ash Road		Type of Pipe: Conc
Downstream MH Address:	8968 Blue Ash Road		Pipe Size (inch): 18.0
Line Location: street			Pipe Length (ft.): Unknown
Surface Cover: asphalt			TVd Distance (ft.): 0.0
PHYSICAL MEASUREMENTS:		MANHOLE DEPTHS:	USMH (ft.):
Section Ground Distance: Unknown			DSMH (ft):
Condition Being Investigated: Pipe Condition			

Footage	Remarks	
0.0	Manhole	Z D.S. towards Creek
0.0	Debris	heavy sand with ponding water. Camera unable to continue, backed out.
		Note: Performed a visual inspection with the camera. Pipe is 1/2 full of water and debris, section needs cleaned. Water is ponding in manhole.

MAP NOT TO SCALE



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Filename: Blue_31.xls

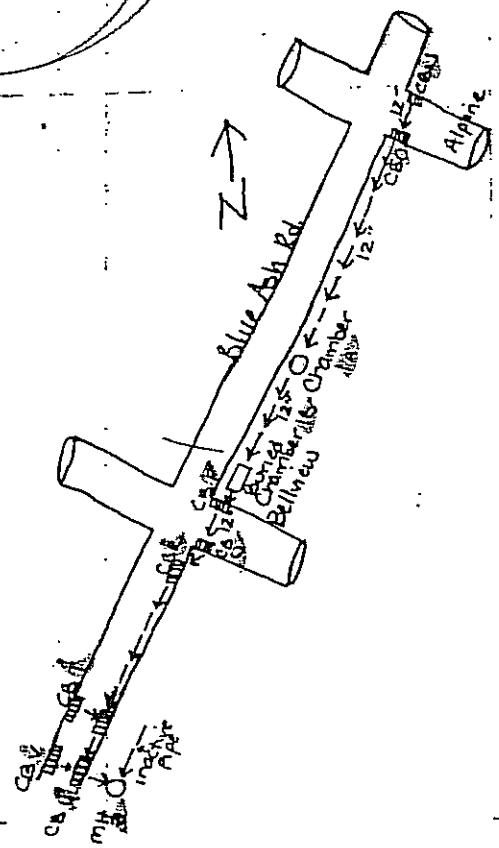
SWS TV INVESTIGATION

Job #: Page 7 of 7

Date: 2/27/01	Investigator: Tim Bilby (SWS)	Video Tape #:	
Area: Blue Ash	Sub-Area:	Video Counter:	04:04 - 04:46
Complaint Address & Date:	City of Blue Ash, Railroad Ave. @ Hunt Road	Weather:	40 F
Upstream MH Address:	8968 Blue Ash Road	Type of Pipe:	Conc
Downstream MH Address:	8968 Blue Ash Road	Pipe Size (inch):	18.0
Line Location: street		Pipe Length (ft.):	Unknown
Surface Cover: asphalt		TVd Distance (ft.):	0.0
PHYSICAL MEASUREMENTS:	MANHOLE DEPTHS:	USMH (ft.):	
Section Ground Distance: Unknown		DSMH (ft):	
Condition Being Investigated: Pipe Condition			

Footage	Remarks
0.0	Manhole Z U.S. to 6" line (inactive)
	Note: Performed a visual inspection with the camera. Pipe is 3/4 full of debris
	and water. Section needs cleaned.

MAP NOT TO SCALE



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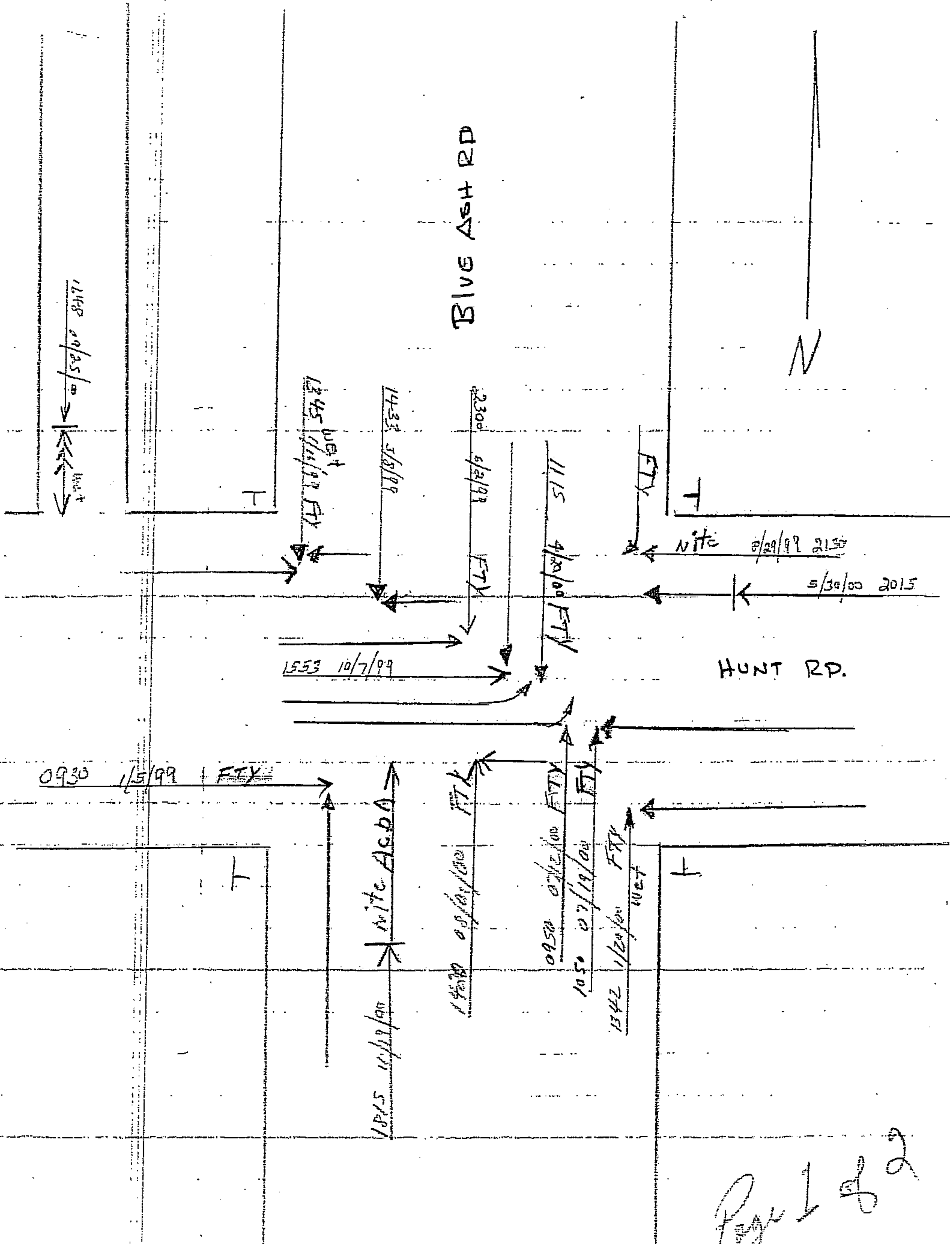
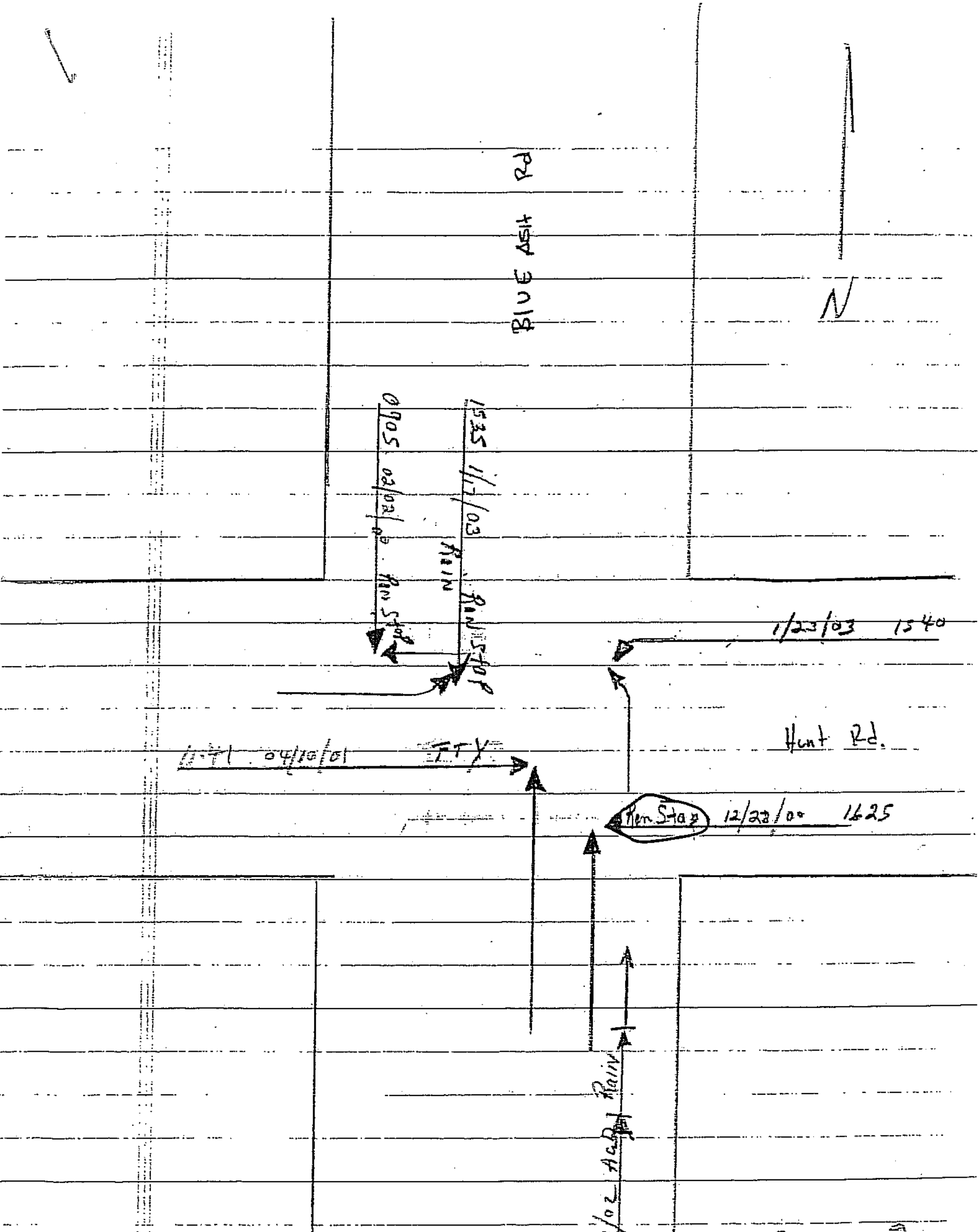
Filename: Blue_32.xls


BLUE ASH RD
HUNT RD.
N
nite 8/29/99 2130
5/30/00 2015
1553 10/7/99
0930 1/5/99 FTY

Page 1 of 2


BLUE Ash Rd
N
0905 02/02/00 Ran Stop
1535 1/17/03 Rain Ran Stop
1/23/03 1540
Hunt Rd.
FTY
Ran Stop 12/22/00 1625
1/27/02 Rain